

April 1946

Standardization



UNITED STATES NAVY



Certificate of Achievement

AWARDED TO

American Standards Association

IN RECOGNITION OF EXCEPTIONAL ACCOMPLISHMENT IN BEHALF OF THE UNITED STATES NAVY AND OF MERITORIOUS CONTRIBUTION TO THE NATIONAL WAR EFFORT

William Hensel

ASSISTANT SECRETARY OF THE NAVY

5 January 1946

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Veneer Association

Company Members—

Some 2000 Industrial concerns hold membership either directly or by group arrangement through their respective trade associations

Readers Write

Request Safety Standards For Bookbinding and Printing

Bookbinding and Book Production

Gentlemen: We are currently reviewing some of the state safety laws for our readers as part of the industry's efforts to improve safety conditions. I note that several states accept and enforce the standard safety codes sponsored and published by your Association. May we have copies of those codes relating to printing and bookbinding? Should they be of interest we would like to reprint them—with credit, of course—as part of our series on safety.

WALTER KUBILIUS

News Editor

• • The American Standards Association was pleased to send a list of American Safety Standards to Bookbinding and Book Production for consideration.

Need for Definitions of Colors Used in Safety Code

Benjamin Electric Manufacturing Company

Gentlemen: We are preparing an Illumination Design and Equipment Data Sheet on the safety lighting of traffic obstacles. This literature will be addressed to both illumination engineers and safety engineers. However, we believe that it will be desirable to further standardize on three basic colors, red, yellow and green. We are enameling some of our lighting equipment to be used in the above application a yellow color. To be correct in our application of this color system we would appreciate very much if the American Standards Association would send a Munsell color rating for these three colors. We wish to take this opportunity to commend the American Standards Association for the excellent work that they are doing and have done in the past.

JAMES R. CHAMBERS

Application Research Engineer

• • The American Standards Association has not yet agreed upon standard definitions for the colors used in Safety Color Code for Marking Physical Hazards and the Identification of Certain Equipment, Z53.1-1945, but a subcommittee is working on this subject.

State Uses National Standards for Uniform Safety Rules

Department of Industrial Relations, California

Gentlemen: We are attempting in our General Safety Orders to use national standards, ASA where possible, as we are convinced that the more uniform state requirements can be, the better will be the results.

C. H. FRY, Chief

Division of Industrial Safety

Manufacturers Responsible for Standard Machine Guards?

State Industrial Accident Commission,
Oregon

Gentlemen: It is my belief that a satisfactory standard of safeguarding can be accomplished only through the manufacturer. Our reasoning is quite generally agreed upon. A safeguard should be part of a machine. It should not distract from the efficiency or attractiveness and should be designed to last throughout the life of the machine to which it is attached. These points should be of special interest to the manufacturer, the customer, and all state safety agencies, as well as the National Safety Council, U.S. Department of Labor, and the American Standards Association.

Considering the pertinent points involved in this problem, we believe a program for standard safeguarding of industrial machines by the manufacturers can be best organized by the national organizations, with state organizations supporting the program to the best of their ability. With the participation of all the above agencies, a great deal of emphasis could be placed on the advantages of a guarded machine.

It would be interesting to know how many of the 48 states are encountering difficulties in the proper safeguarding of machinery and how many of these states would be interested enough to participate in such a program or would support legislation that would help to accomplish results.

CHARLES M. McBEE
Assistant Director
Accident Prevention Division

Detroit Refrigeration Code Refers to American Standard

Department of Buildings and Safety
Engineering, Detroit, Michigan

Gentlemen: The new Official Refrigeration Code of the City of Detroit is quite similar to the ASA Code covering the same equipment. Reference is made, in both the City of Detroit Code and the ASA Code, to the American Standard Safety Code for Mechanical Transmission Apparatus, ASA B15-1927 with revisions. Will you kindly send us a copy of the ASA Code B15-1927 with revisions and any other available material pertaining to the subject?

H. H. MILLS
Chief Safety Engineer

Our Front Cover

John L. Sullivan, Assistant Secretary of the Navy for Air, presenting the Navy's Certificate of Achievement to Henry B. Bryans, president of the American Standards Association. The award was presented to the American Standards Association for its work on safety standards. See article on page 81.

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April, 1946

Ruth E. Mason, Editor

35 Cents

The American Standards Association is a federation of national groups dealing with standardization. Through it, government, industry, labor, and the consumer work together to develop mutually satisfactory national standards. It acts as the authoritative channel for international cooperation in standardization work.

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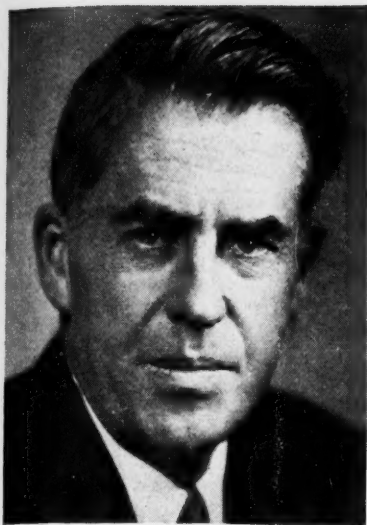
Charles Phelps Cushing

Up-to-date edition of American Standard Elevator Inspectors' Manual will help city and state inspectors, insurance inspectors, and maintenance employees keep crowded elevators in safe condition

See article on page 78

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APR



Henry A. Wallace

A New Opportunity For Free Enterprise



Charles E. Wilson

Exchange of letters between Wallace, Wilson, and Bryans places greater responsibility on industry and ASA for standards development

THE study by the U. S. Department of Commerce of the relative roles of industry and government in standardization came to a climax this month in a three-way correspondence between Henry A. Wallace, Secretary of Commerce; Charles E. Wilson, chairman of the Policy Committee on Standards; and Henry B. Bryans, president of the American Standards Association. In his letter accepting the report of the Policy Committee on Standards, Secretary Wallace reverses the war-time trend and proposes to return to private enterprise the important function of determining industrial and consumer standards.

Mr Wallace's letter to Charles E. Wilson, president of the General Electric Company and chairman of the Policy Committee on Standards appointed by the Secretary of Commerce in January 1945¹, characterizes the negotiation and publication

of standards through private initiative and on a wholly voluntary basis as "eminently desirable". In the letter (published in full below), he reviews his plan to reorganize the National Bureau of Standards, and states that to the extent that the work of the American Standards Association is strengthened in accordance with the recommendations of the Policy Committee "so that it can perform trade standard services to the satisfaction of all the groups with an interest in standards, the Department is prepared to encourage the use of the facilities of the American Standards Association for the initiation, development and publication of standards". He expresses the hope that American industry will support and take advantage of the facilities of

¹The first report of this committee and a description of the events that led to its appointment are published in INDUSTRIAL STANDARDIZATION, July 1945, pp 144-149.

the American Standards Association.

In the three-way correspondence between the Department, the Policy Committee, and the ASA, the Policy Committee has given assurance that industry will make possible the necessary extensions of the facilities of the ASA to enable it to render all desired services (see report of Policy Committee, p 69); and the ASA has informed Secretary Wallace and the Policy Committee of its acceptance of the responsibility (letter reproduced in full on p 68).

Plans are already under way to expand the ASA financial structure as well as to broaden the incidence of support and participation in the ASA. (On page 71, Howard Cooley, chairman of the ASA Executive Committee, describes some of the implications of the new policy and the steps being taken to expand the ASA in order to put the new policies into effect.)

U. S. DEPARTMENT OF COMMERCE
OFFICE OF THE SECRETARY
WASHINGTON 25, D. C.
February 28, 1946

Mr Charles E. Wilson, Chairman
Policy Committee on Standards
New York, New York

DEAR MR WILSON:

This is with reference to the report of your Policy Committee on Standards which was made last June, and the supplementary report submitted on December 22, 1945, after further hearings on the original report. I am very sorry not to have been able to write you sooner on this matter, but I wished to have a careful study made of these reports in relation to the proposed reorganization of the Department.

I believe that the Department can accept whole-heartedly the general objectives and spirit of your Committee Report, which is to encourage the wider use of standards in industry and to bring about the greatest possible cooperation among the various organizations active in this field. The Department will be delighted to see the American Standards Association and other organizations pursue a vigorous program in the field of trade standards and will cooperate to the fullest extent in providing both scientific and technical, and economic and marketing data which will be useful in such a program.

One of the two principal recommendations of your Committee fits in very well with the plans for the reorganization of the Department. I refer to the recommendation that the divisions of Simplified Trade Practices and Commercial Standards be transferred out of the Bureau of Standards to a "more suitable status elsewhere in the Department", and that "the Bureau of Standards' functions should be those of basic research, furnishing of facts, measurements and technical assistance in the development of adequate testing methods". The logical place for these two divisions is the new Office of Domestic Commerce, which will be responsible for the Department's general services and programs for the promotion of domestic industry, business, and trade. In accordance with your recommendations, I am planning to have these divisions transferred from the National Bureau of Standards to the Office of Domestic Commerce as soon as it is legally possible and suitable internal arrangements can be made.

The other principal recommendation of your Committee is that the Department of Commerce withdraw from the field of initiating and publishing standards which are voluntarily agreed to by industry groups as soon as the American Standards Association "implements itself for such functions". Your Committee has supported this recommendation with the following considerations: (1) that "interested private groups are best qualified to initiate and formulate voluntary standards"; (2) there is now some duplication of effort as between the American Standards Association and the Department; and (3) the voluntary standards published by the National Bureau of Standards have sometimes been misinterpreted as scientifically determined government standards, or as compulsory standards.

Certainly the Department does not wish to compete with, or to duplicate, the services which private organizations can provide equally well, nor does the Department wish to have voluntary industry standards misinterpreted as scientific or compulsory government standards. We have tried to guard against such misinterpretations by printing on the face of the booklets published by the National Bureau of Standards, "A RECORDED VOLUNTARY STANDARD OF THE TRADE", and in other ways.

I do not believe, however, that the Department of Commerce can properly close the door to industry and other economic groups which request the direct assistance of the Department in developing and in publishing voluntary standards on their behalf. The Department has a statutory responsibility to provide such services in the interest of business and industry and the general public and we have no authority to refuse such requests. In addition, there may be circumstances in which the cooperation of the Department of Commerce and the Department of Justice will be desirable in order to avoid any possible misinterpretation of voluntary industry agreements on standards in relation to the anti-trust laws. However, to the extent that the American Standards Association reorganizes its procedures in accordance with the recommendation of your Committee so that it can perform trade standard services to the satisfaction of all the groups with an interest in standards, the Department is prepared to encourage the use of the facilities of the American Standards Association for the initiation, development, and publication of standards.

In view of the tremendous list of commodities, practices, and services and the limited facilities of the Department in the commercial standardization field, it would seem eminently desirable that the American Standards Association and other voluntary business groups as well, expand and improve their facilities for negotiating and publishing trade standards. In fact, I regard it as one of the important functions of the Department of Commerce to encourage and stimulate such a development. The Department itself does not plan, nor can it hope to monopolize this field of activity. On the contrary, it is the job of the Department as I see it to stimulate and assist activity by private groups in this field and to perform a pilot function in commercial standardization work as it has been doing for some two decades.

In view of the above considerations, I envisage that after their transfer from the National Bureau of Standards the divisions of Simplified Trade Practices and Commercial Standards will perform the following functions with respect to voluntary trade standards and simplified trade practices:

1. As recommended by your Committee, sponsor and perform basic research in the economic and marketing fields for the American Standards Association and other groups and organizations engaged in formulating voluntary standards or desiring to initiate standards;
2. As recommended by your Committee, act as sponsor for groups in proposing standards to the ASA for issuance as American Standards;
3. Retain the Department's present function of initiating and proposing to the ASA or to any other group or groups the development of voluntary standards where the Department finds on the basis of economic studies that such standards would be desirable in the public interest; and
4. Retain the function of publishing a voluntary standard developed by a group if that group requests the Department to publish. Such standards will be published by the Department of Commerce (not the National Bureau of Standards) and will clearly indicate the industry or other group or groups on whose behalf the Department is publishing. However, where testing methods or the research of the National Bureau of Standards have contributed to the establishment of particular standards, appropriate credit will be given to the Bureau in publication.

This in general will mean the continuance of the functions of the Department on commercial standards and simplified trade practices in accordance with well established procedures. However, the Department would be prepared as a matter of policy to suggest, when the Association's facilities are adequate, that standards be submitted to the ASA for publication as American Standards. The business group would, however, be perfectly free to make its own decisions as to whether to publish the standard under its own name; through the American Standards Association; or through the Department of Commerce.

The Department is interested in cooperating actively with your Committee and with the ASA and other interested groups to promote the wider use of voluntary standards and their adoption to the needs of the nation's commerce in the postwar years. I should like to suggest that a joint conference committee of the ASA and the Department be set up for this purpose. I believe that this conference committee should cover the entire field of standards—the scientific, technical, and testing aspects as well as the economic, marketing, and trade aspects of the problem—and that the Department's representatives on the committee should therefore include scientists of the National Bureau of Standards as well as officials of the Office of Domestic Commerce, Office of the Solicitor, and the Office of Program Planning.

I should also like to ask that your Policy Committee on Standards continue to function as an advisory group to me and to the Department of Commerce so that I may consult it from time to time on questions of broad policy in the field of standards. I feel that the experience of your Committee during the last year will be of great value in dealing with additional problems which will arise in this growing field of standards, and that the continuance of the Committee will insure maximum use and benefit of that experience.

I wish to express to you and to your Committee my sincere appreciation of the service which you have performed for the Department and for American business in your consideration of this important subject. Your studies have helped to clarify the entire situation and to point out some of the things that need to be done to promote the more extensive use of standards in the postwar period. I sincerely hope that I may count on your continuing cooperation.

There is attached an abstract of this letter outlining the Department's future policy on standards which has been prepared to meet Mr Knoderer's request for a short and succinct statement for general distribution.

Sincerely yours,

H A Wallace

HENRY A. WALLACE,
Secretary of Commerce

ASA Accepts Challenge For Expanding Program

Henry B. Bryans, President

AMERICAN STANDARDS ASSOCIATION
NEW YORK 17, N. Y.

March 8, 1946

*The Honorable Henry A. Wallace
Secretary of Commerce
Washington, D. C.*

MY DEAR MR SECRETARY:

The American Standards Association and its affiliated organizations greatly appreciate the confidence in them which you expressed in your letter of February 28, 1946, to Mr Charles Wilson as Chairman of the Policy Committee on Standards.

Through a change in its constitution, the American Standards Association has been enabled to broaden the scope of its work so that it may deal with standards or standardization projects deserving national recognition, whether in the field of engineering, consumer goods, safety codes, or in other fields. Arrangements are under way for the addition to our Board of Directors of leaders in the consumer goods field, retail trade and the other interested groups, thus rounding out the representative character of our Board.

The leadership of the Association has been strengthened through the organization of an Executive Committee under the chairmanship of Mr Howard Coonley. Mr Coonley has retired from the chairmanship of the Board of the Walworth Company and is now devoting himself to the job of conditioning the Association to its increased responsibilities.

We sincerely believe that the ASA, with its 28 years of background in servicing the American people, is in a unique position to live up to the requirements placed in its hands by your letter to Mr Wilson and by the report of Mr Wilson's Committee. We, therefore, accept the responsibility entailed.

Your belief in the ability of private enterprise to demonstrate its effectiveness through voluntary action lends greatest significance to the responsibility which the American Standards Association and its affiliated bodies are accepting. We have a record of successful operation in the field of industrial self-regulation. We feel that the arrangements suggested by the Depart-

ment of Commerce have opened the way for a new concept in the relationship between Government and industry. It is our privilege to validate the responsibility which industry and private groups must carry in the development of means for better standards of living for the American people through the medium of the American Standards Association and its affiliates.

It is particularly gratifying to have you propose the formation of a joint committee of the Department of Commerce and the American Standards Association to cover the entire field of standards and I believe that in this way we shall be able to avoid duplication through close cooperation and alignment of our operations. The wealth of experience represented by the Policy Committee on Standards that you have invited to remain in operation in an advisory capacity will contribute greatly to the joint development of standards by all concerned.

We have been greatly interested in the administrative changes which you are making in order to improve your services to groups concerned with standards. The transfer of the Divisions of Simplified Practice and Commercial Standards to the new office of Domestic Commerce should, as you indicate, minimize the misinterpretation of the standards as scientifically determined Government standards. We note that the two divisions will sponsor groups in proposing standards and standardization projects to the American Standards Association. We appreciate this function which, we believe, will be useful to all concerned.

We also note that the Department will publish a voluntary standard developed by a group if that group requests publication by the Department, but that the publication will clearly indicate the group on whose behalf the Department is publishing it. We are glad to



note this last provision since it should tend to minimize misunderstanding as to the status of the standard and its relation to the Government.

The sponsoring and carrying out by the Department of basic research in the economics of standards and their use in the marketing field should perform a much needed function which will be of great value to industry and to the consuming public.

The steadily increasing demand for standards on the part of industry and the great increase in the use of standards and interest in them brought about by the war have made necessary important changes in our organization and work of the American Standards Association.

Considerable progress has been made in simplifying and decentralizing the technical work and further streamlining of processes in order to speed up the development and approval of standards.

More systematic programming in the fields in which the ASA is working is being brought about through closer coordination and changes in committee setup.

Plans are already under way to expand the ASA financial structure. It is now contemplated to carry out an active and continuous program to provide for an increased budget which will broaden the incidence of

support and participation in the ASA. Thirteen national organizations have affiliated in the last year. There are now 94 national organizations in the membership. The principal consumer and labor groups are represented on the main ASA committee on consumer standards.

In conclusion, I cannot refrain from saying a few words in regard to the remarkably effective cooperation which we have had from the National Bureau of Standards for a quarter of a century or more. The Bureau is represented on considerably more than 100 ASA committees. In particular, the research work of the Bureau has been of invaluable assistance to a great number of agencies engaged in standards work. There is serious need for a large amount of this type of technical data, and we hope that under the new arrangements, the Bureau can be provided with sufficient resources to meet this need.

With many thanks for your constructive consideration of this subject of standardization, and with best wishes,

Sincerely,

HENRY B. BRYANS,

President

The Final Report of the Policy Committee on Standards

To the Secretary of Commerce

PURSUANT to the suggestion conveyed to this Committee by your Assistant, Mr Malcolm Kerlin, that the Policy Committee on Standards should have further hearings of interested groups concerned, invitations were issued to consumer groups, labor groups, and educational groups to meet with the Committee at a public hearing.

Attached Appendix "A" [not included in this publication] is a copy of the Committee's call of meeting of September 10, 1945. A copy of this call was sent personally to each of the following:

Henry B. Bryans, President, American Standards Association.
Carroll L. Wilson, National Planning Commission.
Malcolm Kerlin, Assistant to the Secretary of Commerce.
Lyman J. Briggs, Director, National Bureau of Standards.
J. W. Studebaker, Commissioner, U.S. Office of Education.
George F. Zook, President, American Council on Education.

Harry E. Rogers, President, Brooklyn Polytechnic Institute.
Donald E. Montgomery, Member of the ASA Advisory Committee on Ultimate Consumer Goods for the CIO.
Colston Warne, Amherst College (Honorary Vice President, National Consumers League).
Helen Hall, Director, Henry Street Settlement, New York; National Federation of Settlements.
Ruth O'Brien, Bureau of Human Nutrition and Home Economics, U.S. Department of Agriculture.
Murray Lincoln, Executive Secretary, Ohio Farm Bureau Federation.
Faith Williams, Member of the ASA Advisory Committee on Ultimate Consumer Goods for the American Association of University Women.
Caroline F. Ware, Chief, Social Division, American Association of University Women.
Florence Thorn, Head, Research Department, American Federation of Labor.
Margaret Scattergood, American Federation of Labor, Research Staff.
M. H. Hedges, Director of Research, International Brotherhood of Electrical Workers.
Selia Massey, Executive Secretary, American Home Economics Association.

Harriett Howe, American Home Economics Association, Consumer Education Service.
Carol Moffett, American Home Economics Association.

Those attending this meeting were in each case representing a specialized organization or association, as is evidenced by the following list of those present:

American Home Economics Association, Carol Moffett.
American Association of University Women, Carol F. Ware.
Bureau of Human Nutrition and Home Economics, U.S. Department of Agriculture, Ruth O'Brien.
Advisory Committee on Ultimate Consumer Goods to the American Standards Association, Representative of the American Association of University Women, Faith Williams.
American Federation of Labor, Research Staff, Margaret Scattergood.
International Brotherhood of Electrical Workers Research, William D. Walker.

In full attendance of the Committee, a detailed discussion of those

present brought forth the desires and reactions of each group or individual present. Before the close of this meeting each group was requested to present its point of view with definite recommendations as to how its desires might be accomplished. Such reports have been received and analyzed with the Committee's report of June 1, 1945.

Your Committee does not believe the report needs to be changed, as all suggestions or requests for change, after close comparative study, demonstrate that the implementation of the report by the American Standards Association and by the Department of Commerce and Bureau of Standards will in every case produce the results desired by each one and every interested body.

The June 1, 1945, report enunciates two specific recommendations:

First. That standards activities which involve negotiation, opinion, judgment, or compromise should be developed through individual and joint efforts of technical, manufacturing, merchandising, and consumer groups. It was contemplated that this was to be fulfilled by the American Standards Association only when and as it implements itself for such functions and as it demonstrates its ability to perform efficiently, expeditiously, and satisfactorily, as it has demonstrated heretofore on industrial standardization.

Second. That the National Bureau of Standards' functions should be according to those of basic research, furnishing of facts, measurements, and technical assistance in development of adequate testing methods.

A review of objections and suggestions of the represented groups follows. When reviewed in relation to the report of June 1, and with the organic act and statutes under which the National Bureau of Standards operates, the comments* given here disclose the evident means now available to meet such objections or suggestions. It was the consensus of those attending the hearing:

(a) That American Standards Association should implement itself to be the clearing house for all standards activities which involve negotiation, opinion, judgment, or compromise.

* COMMENT: Such a recommendation was included in the June 1st report.

(b) That there is a need on the part of various groups—such as consumers and retailers of manufactured goods—for basic research and furnishing of facts, measurements, and technical assistance in development of adequate testing methods.

* COMMENT: This falls within the Organic Statute creating the National Bureau of Standards.

(c) That there is a need for research and technical consultation—which can include studies of the economics that might result for consumers from performance and operational standards; the determination of consumers' reactions to performance standards used in merchandising surveys to determine the need in consumer and commercial fields.

* COMMENT: This might fall within various agencies of the Department of Commerce.

(d) That there is a need for the bringing together of such interested groups into a cohesive whole.

* COMMENT: It is suggested this might be done in the National Bureau of Standards by the setting up of an Interdepartmental Advisory Board drawn from other agencies of the Government and also a Consumers Advisory Board.

(e) That there is a need for the development of standard specifications upon request.

* COMMENT: It was suggested that this could be accomplished through the National Bureau of Standards and other technical agencies of the Department through development of standard specifications when requested to do so by important national groups, such as a Consumers Advisory Board of the National Bureau of Standards, by a retailers association, or by an association of manufacturers of a particular type of goods.

(f) That there is a need for the early publication of information relating to the specifications as and when sufficiently advanced to be of value.

* COMMENT: It is suggested that when published it be in the name of the group that requested the work, along with credit to the agency developing the specification.

(g) That the National Bureau of Standards should undertake these functions, including the publication and enforcement by and under the name of the National Bureau of Standards.

* COMMENT: It is pointed out that trade standards and simplified

practice recommendations are actually voluntary standards of the trade, but because they have heretofore been published by the Government, they have been generally regarded as Government standards. To eliminate this confusion, trade standards and simplified practice recommendations should be first published by the group sponsoring the standard or recommendation.

The use of any such standard is voluntary. A certificate and labeling procedure should be developed by the ASA for the guidance of any one when he elects to use a standard. Enforcement enters the picture only if misrepresentation occurs and the matter then comes under the jurisdiction of the Federal Trade Commission.

The Committee has carefully reviewed these suggestions and in doing so recognizes that:

(a) and (b) are in line with the Committee's recommendation.

(c) (d) and (e) are matters relating to internal organization setup and work within the Bureau of Standards.

A study of the original report of June 1, 1945, discloses that in no way is it at cross purposes with any of the stated needs except that publication of such a developed specification or standard should not be done by the National Bureau of Standards until it has been duly submitted and sponsored and approved by the American Standards Association. However, the Committee sees no objection to the publication of such standards by other than governmental groups, prior to approval by American Standards Association as an American Standard. Either the group or the Bureau of Standards should be the sponsoring body of such a standard to the American Standards Association through which it is to be adopted as an American Standard. Any non-governmental group creating such a standard, and not desiring that it be an American Standard, may publish it under its own name as a standard of that group.

Through this procedure the National Bureau of Standards will supply to all legitimate groups the full facilities offered through the Organic Act or National Statutes creating and continuing the Bureau. Also through such procedure all bureaus of the Government can consistently

supply factual data as may be available and of interest. Through the above steps all desires of these parties in interest can be met.

The initial publication of commercial standards and simplified practice recommendations by the Department of Commerce has led to their acceptance as standards developed and approved by the Government, whereas actually they represent voluntary recorded standards of the trade.

The Policy Committee on Standards therefore recommends:

(1) That hereafter consumer standards, commercial standards, and simplified practice recommendations may be first published by the consumer group or the industrial group requesting and sponsoring the standard or recommendation, with appropriate acknowledgment of the technical assistance of the National Bureau of Standards in its preparation.

(2) That such standards prepared

for such groups by the Department of Commerce should be submitted either by the group interested or by the Department of Commerce as sponsor to the American Standards Association for approval.

(3) That after approval by the American Standards Association such standards should then be issued as an American Standard. The request for approval to the American Standards Association may be made under the sponsorship of the Department of Commerce, or any other sponsor.

The Committee recognizes that this procedure can be accomplished only as fast as the American Standards Association implements itself for such functions. Progress is being made in this direction and sanguine hopes point to such accomplishment early in 1946.

The task lying ahead appears an entirely feasible one. Liaison work of this committee establishing cohesion of interest between the De-

partment of Commerce—the American Standards Association and interested standardizing bodies will, we confidently believe, demonstrate the soundness of the recommendations contained in the Committee's report of June 1, 1945.

In conclusion we wish to quote from the last paragraph of the June report; namely, "that the approach recommended—calling for a functional division of effort between the Department (including the National Bureau of Standards) and interested private groups (including the American Standards Association) and for active cooperation among all parties concerned—offers great promise as a means of guiding the progressive adaptation of standards to the needs of the nation's commerce during the decades immediately ahead."

C. E. WILSON

Chairman,

Policy Committee on Standards

Standards and Free Enterprise

By Howard Coonley

How thoroughly industrial management makes use of the American Standards Association in developing efficiency and economy promises to play an important part in the preservation of the American system of free enterprise

SECRETARY WALLACE'S letter proposing that private enterprise assume the primary responsibility for the important function of standardization is a constructive document that has far greater implications than its application to standardization. More than ever before, the United States has become an almost isolated island of free enterprise in a world committed to or experimenting with dictated or Government-controlled economics. But the greatest mistake we could make would be to assume that this freedom is a permanent and inviolable inheritance—it is only as safe as free enterprise is adept in solving its own problems. Whenever private enterprise fails to find its own solution to its problems, it mortgages its future to government.

It is for this reason that Mr Wallace's letter, the first occasion on which Government has indicated its willingness to give back to private enterprise some of the freedom it has lost, is of special interest to every individual and every company engaged in standardization.

For this reason, too, this letter and the report of the Policy Committee on Standards place a serious responsibility on the American Standards Association and on American industry.

The American Standards Association has accepted this responsibility. In doing so, it has taken action to speed approval of standards, has made provision for enlarging the ASA Board of Directors to add three members-at-large representing the point of view of the consumer, the

retailer, and national publications, and has broadened its scope through a change in its constitution so as to be able to handle standards in any field requiring national standardization. An executive committee has been set up, of which I am chairman, to find ways and means by which the American Standards Association can meet the responsibilities it has now assumed.

Within the past year, 13 national organizations have joined the American Standards Association; but in order to carry out its new obligations the American Standards Association must have a greatly enlarged membership and financial support.

The ASA staff must be strengthened and increased to meet the tremendous amount of new work in the engineering field as well as to take care of the new activity in the consumer goods field. Several hundred standards must be reviewed to determine whether they should now be

NOTE: This article is based on addresses presented before recent meetings of public relations executives, the Conference Committee of Staff Executives of ASA Member organizations, and the ASA Company Member Committee.

revised to bring them up to date. Some 150 emergency standards and war standards must be reconsidered and reprocessed to bring them into line with peacetime needs. In addition, requests for work in new fields will require an increase in staff and a substantial increase in the budget.

The responsibility for meeting the Government's challenge does not lie with the American Standards Association alone.

The story of standardization is the story of management's achievements that make possible mass production. Management must meet the Government's challenge and with greater vision than it has shown in the past make the development of national standards a part of the function of management.

War Experience Intensified Interest in Standards

My experience with the Emergency Fleet Corporation during the First World War, where lack of standardization was a serious handicap to the complete success of our ship-building program, initiated my own interest in standards. This interest was tremendously increased by my observations of the program of conservation, standardization, simplification, and specifications work of the War Production Board in this war. To illustrate—one of the important causes of the defeat in the first battle of El Alamein and the British retreat in North Africa was the lack of good standard parts in the equipment of the tanks—components of the radio sets and parts of other auxiliaries. Some of the radio components failed and as a result the radio sets went out of commission and the tank commander could not communicate with the members of his force. Each tank was on its own and disaster resulted. Also, many tanks had to be abandoned for the failure of a single part which was non-standard and could not be replaced.

Interchangeable Radio Components Helped in Final Campaign

Through intensive effort to standardize these components and make them interchangeable, many of these faults were corrected and the British and American forces were not hampered in this way in the final campaign.

My own experiences as head of the Conservation Division of the War

Production Board, and as chief advisor to the Chinese Government in setting up a Chinese War Production Board, have persuaded me that the influence of the American Standards Association and the principles of standardization should be extended to all industries—including the consumer goods industries where it would become a supporting force to advertising in the marketing of consumer products.

Standards in most cases have an important bearing on the public relations of all industries.

Howard Coonley, chairman of the Executive Committee of the American Standards Association, is a member of the Executive Committee of the Walworth Company and is past president and chairman of the Board of that company. He is past president of the National Association of Manufacturers and of the American Standards Association. During World War II he was in charge of standardization activities as head of the Conservation Division of the War Production Board. He then went to China as chief advisor to the Chinese Government in setting up a Chinese War Production Board. He is now giving nearly full time to solving some of the expansion problems of the American Standards Association.

Several years ago the American Gas Association brought to the ASA the problem of standards for gas appliances. Through the cooperation of all concerned, there are now American Standards for all of the types of gas-burning appliances and accessories to be found in a well-equipped home. Within two years, this led to the re-designing of every gas-fired hot water heater on the American market—for it was found that every one of the former models threw an amount of carbon monoxide into the air which exceeded the standard set for safety and health. Here was a public relations problem of the first order.

On the other side of the ledger,

the research and standards work of the program led to more improvements in gas-burning appliances than had taken place in 40 years previously. These included such things as 50 percent increase in the efficiency of the top burners and many other accomplishments in the way of increased efficiency and convenience—another important step in public relations.

At one time there were restrictive ordinances governing sale and use of gas-burning appliances in some 50 cities. This standards program has led to the elimination of these ordinances which formed trade barriers of some importance, and there is now a pretty free national market for gas appliances unencumbered by local restrictions. Thus this one program has three accomplishments of first importance in the public relations of two industries—the appliance manufacturers and the gas utilities.

Definitions of Technical Terms Important

One important form of standard is the definition of technical terms used in industry and technology. We have a technical dictionary of 3500 electrical terms which has come to be looked upon as a sort of bible by the electrical industries. The ASA is now starting a similar project on definitions of textile terms used in the retail trade. This program will be worked out in cooperation with the Better Business Bureaus which have already accomplished much in this field, together with the other interested groups. One very important term, "rayon", has already reached the stage of international discussion with the British. The British use the term "rayon" for practically all man-made fibers such as rayon, aralac, fortisan, and fiberglass. In such work on definitions, industry has the opportunity to handle one of its important public relations problems rather than waiting for the problem to drift under governmental regulation. For example, most problems involving the question of "truth in advertising" are dependent upon recognized definitions of the terms used.

Oxychloride Problem Brought to ASA

Oxychloride Cement is a product which is used extensively in making floors in public buildings and in other architectural applications. The

industry has found itself in trouble as a result of the contractors using inferior methods in installing the product. The industry has hitherto had no standards either for the products used or for the installation. It has brought this problem to the ASA and standards to meet this rather serious situation are now under development.

Electrical Standards Help Understand Rating of Motors

The electrical manufacturers have spent millions of dollars in the development of rules for the rating of electrical machinery so as to be in the position to answer such a simple question as "What do you mean by a 10-horsepower motor?" Formerly motors marked "10-horsepower" actually differed in their capacity by as much as 50 percent. There are now American Standards for rating electrical machinery and for many other types of electrical equipment. Some of this work has reached international status.

With the rapid development of newer forms of lighting, such as fluorescent lamps and mercury vapor lamps, a situation could easily develop in which the lamps made by one manufacturer would not fit the sockets intended for the lamps of a different manufacturer. At the request of the manufacturers, the ASA is undertaking to set up standards which will insure continuing interchangeability of the various types of lamps. Since the public will be better served as a result and since manufacturers of lamps, lamp sockets, and other accessories, and their dealers, will save money by the resulting simplification, this entire project seems to be an example of smart public relations on the part of the groups participating in the undertaking.

American Standards Used By Local Governments

Through its cooperative methods, the ASA has developed many standards which are used wholly or in part as regulations of state and local governments. Thus the backbone of the regulations of the state governments for the protection of workmen consist of some 80 American Standard Safety Codes.

A similar use of standards is being made in the building code field.

Some years ago an acute controversy arose in an ASA committee in

regard to safety standards for use in the construction of power and communication lines where they crossed each other or crossed railroad property. The controversy was waged between the national utility groups concerned. The state commissions had indicated that if these groups should be able to agree upon a standard, they would gladly accept it. One of the contesting groups threatened to pull out and fight its case out before the various state commissions, even though the situation might result in costly litigation in the courts as well. The question was put up to the president of this important and powerful group as to whether it was preferable, from the point of view of their long-time relations to the public, to enter into a series of contests in each of the states, knowing that if this were done, the industries would almost certainly be confronted with conflicting decisions in different states, conceivably 48 different decisions. Or was it wiser for the industries themselves to work out the best possible solution, knowing in advance that the states would gladly accept such solution? After a few minutes' thought, he replied "You win." A thoroughly workable standard was agreed upon and with appropriate revisions, worked out by the same methods, is still in effect.

Standards as Dynamic Controls

These illustrations should help to dispel any possible apprehension, if such apprehension exists, that standards mean regimentation. To an industrialist a sound standard represents the best way of doing a thing—at the moment. If tomorrow he finds a better way, he will codify it in a new standard. When properly carried out, standardization is dynamic, not static. It means, not to stand still, but to move forward together.

Whether or not management gives attention to standards and provides for their orderly development is of immense importance to the preservation of our system of free enterprise. For standards are basic controls. They serve as ligaments and tendons in the industrial structure.

Management Holds the Answer

Should these controls be taken over by Government, an important section of the system of free enterprise will have disappeared.

The answer lies with management, for as Justice Frankfurter once said,

"It is too often overlooked that government as a rule undertakes no services or regulations except after private agencies have proved themselves incapable or unwilling."

Purchasing Institute Starts Program on Standards

THE National Institute of Governmental Purchasing, Inc, through its Committee on Standardization, Specifications, and Commodity Testing, is now considering many suggestions for a standard commodity classification. It is also devising a simplified outline specification that can be adapted to various products and which would prove useful to governmental agencies that lack the testing equipment possessed by some of the larger units of government.

Albert Pleydell, commissioner of the New York City Department of Purchase, is chairman of the committee. Its other members are:

W. Z. Betts, North Carolina State Division of Purchase and Contract
M. M. Donohue, Purchasing Agent, County of Allegheny, Pennsylvania
B. L. Gill, Purchasing Agent, City of Madison, Wisconsin
William Hornbuckle, Commissioner of Purchases and Supplies, Kansas City, Missouri
Byron L. Snyder, Purchasing Agent, County of Ventura, California
Gentry W. Yates, Purchasing Agent, Portland, Oregon

Advisors to the committee are:

J. W. Hughes, Purchasing Agent, County of Los Angeles, California
P. A. Morley, Purchasing Agent, Board of Education, City of Los Angeles, California
Willard V. Pape, Purchasing Agent, City of Seattle, Washington
James F. Williams, Purchasing Agent, School District of Philadelphia, Pennsylvania

Members of the Subcommittee on Commodity Testing are:

Nicholas A. DeMaio, Department of Purchase, New York
John Paine, Chief Engineer of Tests, Department of Public Works, Pittsburgh, Pennsylvania

P. G. Agnew, vice president and secretary of the American Standards Association, is a member of the Advisory Council of the Institute.

Standardization and the Antitrust Laws

By James D. Hayes

James D. Hayes is a Member of the Firm, Donovan, Leisure, Newton, Lumbard, and Irvine



AS a result of the first World War and the tremendous demands made upon industry, standardization became an increasingly important cooperative activity of industry, and the Department of Commerce lent all its influence to promoting industry activity in this field. In 1922, Herbert Hoover, as Secretary of Commerce, requested an informal opinion of the Attorney General as to the legality of trade association activity in general and included in his request the following question:

"May a trade association, in cooperation with its members, advocate and provide for the standardization of quality and grades of product of such members, to the end that the buying public may know what it is to receive when a particular grade or quality is specified; and may such association, after standardizing quality and grade, provide standard form of contract for the purpose of correctly designating the standards of quality and grades of product; and may it standardize technical and scientific terms, its processes in production, and its machinery; and may the association cooperate with its members in determining means for the elimination of wasteful processes in production and distribution and for the raising of ethical standards in trade for the prevention of dishonest practices?"

This was the first occasion upon which any authority had ventured an opinion on the legality of standardization, or rather, it was the first occasion upon which legality, therefore assumed, had been questioned. The Attorney General did not give a very satisfactory answer to Mr Hoover's inquiry in the light of subsequent developments. He said:

"I can now see nothing illegal in the exercise of the other activities mentioned, *provided always* that whatever is done is not used as a scheme or device to curtail production or enhance prices, and does not have the effect of suppressing competition"

It is obvious that with such hedging almost any group activity would be proper under the antitrust laws.

Accepted as Green Light for Standardization

Be that as it may, this correspondence between the heads of the Department of Commerce and the Department of Justice was accepted as giving a green light to technical standardization activity by industry groups and, therefore, for several years, it was often referred to by the Department of Commerce in its efforts to encourage industry activity in this field.

This discussion and interpretation of recent changes in the attitude of the courts and the Federal Trade Commission toward standardization was presented before the first meeting of the Conference Committee of Staff Executives of Member Bodies and Associate Members of the American Standards Association March 7. Executives of 35 trade associations and technical societies that are members of the Association attended the meeting.

C. L. Warwick, executive secretary, American Society for Testing Materials, is chairman of the Executive Committee of the Conference Committee of Staff Executives and served as chairman of the meeting.

The first, and almost the only, mention made by the Supreme Court of standardization activity occurred in 1925 in the familiar case of *Maple Flooring Manufacturers Association vs. United States*.¹ In that case a price-fixing conspiracy was charged against maple flooring manufacturers. One of the means alleged to have been used to effectuate the conspiracy was standardization of grades of flooring. A decree against the Association was entered by the district court, but the decree made no reference to the standardization activities of the Association. On appeal to the Supreme Court, the Court in reversing the decree of the lower court took notice of the Association's standardization activities. The Court said:

"The defendants have engaged in many activities to which no exception was taken by the government and which are admittedly beneficial to the industry and to commerce; such as cooperative advertising and standardization and improvement of the product."

In its discussion of the facts it made no other reference to standardization. At the least, the Court thought standardization beneficial to industry and commerce. However, it is important to note in this case, as I shall point out more fully, that the Association was found not guilty of any price-fixing conspiracy.

In the years following this decision, standardization by joint action of industry thrived, and as far as can be determined no question was raised as to its legality.

Standardization Legal; Illegal When Used for Illegal Purposes

In 1923, a consent decree was entered in a case in which the govern-

¹ 268 U.S. 563 (1925).

ment complained against the *Tile Manufacturers' Credit Association, et al.*², alleging a price-fixing agreement. The complaint listed 17 practices as the subject of the conspiracy. Among these was the allegation that the defendants conspired "to standardize the shapes, etc of tile made, eliminating many now sold, and establish the use of standardized catalogs of said association (catalogs now being prepared)".

The decree provided that nothing therein should be deemed to restrain the defendants from maintaining an association for certain enumerated purposes including "to secure and maintain the standardization of quality and of technical and scientific terms, and the elimination of non-essential types, sizes, styles or grades of products".

On the other hand, the consent decree entered vs the *Carpet Manufacturers of America, Inc* in New York in 1941 prohibited agreements "to limit the kinds, quality, grade, quantity or the number of lines of merchandise to be manufactured and sold".

The conclusion to be drawn from these cases was that standardization when used as a means to further a price-fixing conspiracy or a restraint of production or an elimination of competition was illegal, whereas standardization, as such, was unobjectionable. This conclusion was buttressed by various pronouncements of the Federal Trade Commission, the chief one being a statement by the chairman of the Commission, made in 1931 that "in no matter has the Commission ever held standardization of commodities by members of an industry to be violative of any of the statutes it has the duty of enforcing".

Perhaps the FTC has had a change of heart. Since 1938, hardly a complaint involving trade associations has been issued by the Commission which did not allege standardization as one of the means utilized in advancing and perfecting the alleged conspiracy.

The convenient division of the authorities theretofore thought possible was, however, made somewhat questionable by the Milk Can Institute case. The original complaint in that case was issued in June 1934, under the title of *Keiner Williams Stamping Co, et al.*³ It contained an

allegation that in furtherance of an alleged competition-suppressing and price-fixing conspiracy the respondents (members of a trade association) had standardized the construction of milk and ice cream cans so that they were of uniform material, weight, and general construction. Following this allegation appeared a caveat to the effect that "The Commission is not here complaining against the alleged standardization as such, but only against the use thereof as a means of carrying out the price-fixing conspiracy hereinbefore charged."

No decree was ever entered on this complaint and in July 1941 it was dismissed without prejudice and a new complaint was issued. The matter was now entitled "*In the Matter of the Milk and Ice Cream Can Institute, et al.*"⁴ The amended complaint also alleged a price-fixing conspiracy and as one of the activities engaged in "pursuant to and in furtherance of the aforesaid combination," the elimination of models and styles of cans, the change in designs of cans and other standardization of products independently of and beyond any requirements for standardization prescribed by the Federal or State Governments "for the purpose of eliminating competition in the attractiveness of their products to buyers". Significantly the caveat contained in the original complaint was missing from the amended complaint.

FTC Attacks Standardization as Such

It is particularly to be noted that the language quoted indicates that for the first time the Federal Trade Commission was attacking standardization as such. Any standardization program naturally results in some elimination of competition of attractiveness of product and in some restraint of production in that it standardizes the product available to prospective purchasers. But that end has always been thought to be a justification for standardization. In other words the benefit of standardization to the consumer arises from the very fact that the product is standardized, enabling him to buy with confidence and giving to him the advantage of low prices due to savings in manufacturing costs and interchangeability of parts. These advantages have long been thought to far outweigh any incidental restraint of production arising from

the elimination of special items.

Following hearings in the *Milk Can* case, the Commission made findings of fact and conclusions of law. Among these was a finding that the respondents had engaged in standardization and simplification "as a further means of establishing a basis upon which price differences might be eliminated, and for the purpose of eliminating competition in the attractiveness of their products to buyers". The findings set forth an example of the standardization activity of the Institute which, so far as appears, is a typical association activity. The specific language of the findings is:

"At a meeting held June 14, 1932, the respondent, D. S. Hunter, as commissioner, called attention to the desirability, in the work of standardization, of eliminating if possible some styles and sizes of milk and ice cream cans, especially those for which there was a small demand, and also that consideration should be given to standardizing the weight, as well as the gages, of the various styles and sizes of cans. The Commissioner was instructed to communicate with members to determine what lines of cans could be eliminated. Subsequent thereto, at a meeting held on July 12, 1932, the committee on standards submitted a table of standardization of various styles and sizes of cans by weight and on motion made, seconded, and carried, this recommendation by the committee on standards was adopted by the respondent members. Subsequent to that time, the committee on standards had made various recommendations with reference to gages and weights of milk and ice cream cans which were adopted by the respondent members."

The order to cease and desist entered by the Commission pursuant to the hearings and findings made no specific reference to the standardization activity of the Institute. It did specifically prohibit the members of the Institute from fixing or maintaining prices or adhering to such prices and it prohibited a sales and price-reporting service and a freight equalization system used in connection with price fixing, etc. The decree did contain a general paragraph prohibiting the members from engaging in "any other practice or plan which has the purpose or effect of fixing or maintaining prices . . ."

The Institute and its members appealed from the order of the Commission to the Seventh Circuit Court of Appeals and on January 7, 1946, the Circuit Court rendered its opinion upholding with minor modifications the Commission's order.

The court treated the standardization activity of the Institute and its

² S.D. Ohio, 1923.

³ Docket 2199.

⁴ Docket 4551.

members as evidence of the conspiracy. The court noted that the only basic question before it was whether the members had conspired to fix prices. The court discussed the standardization activities of the defendants as being one of the pieces of evidence supporting the Commission's finding that the defendants had acted in concert and by agreement.

There was no discussion or intimation by the court to show that it thought that standardization by itself would result in a restraint of trade, but its whole discussion was directed to the point that the members had agreed on standardization and that this agreement supported the Commission's finding of a conspiracy. The court said:

"We think it is true that they were standardized in the instant situation, but this was the result of the activities of the Institute and its members. In fact, there was a continuing effort and urging on their part that the cans be manufactured in uniform classifications. It may be, as argued, that much of this effort was to comply with various governmental regulations and for health purposes, but the fact still remains that it was easier to reach the goal of uniform prices on a standard product than on one which was not. The meticulous effort disclosed by the record by which petitioners standardized their products is also a strong circumstance in support of the Commission's findings that their activities were the result of an agreement."

It is true that in the Milk Can case there were the usual other factors present which theretofore had been present in every case where the Commission had attacked standardization, namely, a price-fixing conspiracy, restraint of production, and elimination of competition.

The language of the Federal Trade Commission findings was that a table of standardization "was adopted" by the members of the Institute. There is nothing either in the findings, the order to cease and desist, or the decree of the Circuit Court of Appeals to indicate what the members did when they "adopted" the table of standardization recommended by the Milk Can Institute Committee on Standards. It would seem fair to conclude that what was complained of was merely the fact that the members agreed to adopt certain sizes, styles, and types of cans as standard and that there was no agreement to adhere to the standardized line. If there had been both, the Commission and the Circuit Court of Appeals had many authorities on hand to support a holding that such activity

was a restraint of trade. Since no reference was made to an agreed restraint it seems fair to assume that there was none.

On the foregoing assumptions one must inevitably conclude that the court utilized an agreement theretofore considered perfectly legitimate, namely, an agreement on what the standard shall be, to convict the defendants of a price-fixing conspiracy. Therefore, under this case, no longer will legality of standardization depend upon whether the program is misused and made a part of restraint of trade, but on whether the Association happens to be prosecuted for a restraint of trade arising from any one or more of its other activities.

Prior to the *Milk Can* case, most lawyers active in the trade association field felt safe in advising trade associations that activity in the field of standardization was legitimate as long as the standards were arrived at on sound engineering and technical considerations (as well as considerations of safety and public health) as long as the activity was carried on in good faith and without any intent to fix prices, restrict production, and eliminate competition, and finally, as long as there was no agreement express or implied among the members to adhere to the standards agreed upon.

It is to be noted that the Attorney General, back in 1922, based his clearance of standardization on the premise that the standards were voluntary and that any member was left free to adhere to or depart from standards as he might from time to time see fit. It was never thought to be illegal to agree on what the standards should be. In fact it is obvious that no standardization can be carried on except on the basis of agreement as to what the standards shall be.

Find Danger in Agreement on What Standard Shall Be

Now, however, it appears that there is danger even in an agreement on what the standard shall be in that the Federal Trade Commission and the courts will accept that agreement as evidence of agreement on other matters upon which the law forbids competitors to agree.

I mentioned above that most Trade Commission cases since 1941 against trade associations have contained an allegation that standardization was one of the means utilized

to promote the conspiracy. It is interesting to note in the *Milk Can* case that the Commission found that the standardization work was done "as a further means of establishing a basis upon which price differences might be eliminated and for the purpose of eliminating competition in the attractiveness of their products to buyers". This limitation does not mean much when one remembers that the Commission can always make such an allegation after the fact. In other words, if a restraint of trade exists, a standardization program can always be pointed to as a means of effectuating the restraint. There never has been any doubt that price fixing or restraint of production is facilitated by uniformity of product.

The only comforting thing about the *Milk Can* decision in the Seventh Circuit Court of Appeals is that the court deleted the general catch-all provision of the order to cease and desist, thereby leaving the order without any possible prohibition against the standardization activity of the Institute.

Summary of Present Legal Status of Standardization

To summarize the present state of the antitrust law as it applies to standardization: (1) the activity is legitimate in the absence of any agreement by the participants to limit their production to the standard items; (2) if an association or other group is prosecuted or complained against for a conspiracy to restrain trade either by fixing prices, restraining production or eliminating competition, or any of the variables or combinations thereof, it is almost certain that their standardization activity will be cited as evidence of the conspiracy; (3) it is highly improbable that a trade association or other group will ever be prosecuted or complained against solely for carrying on a standardization program in the absence of any other restraint of trade.

Since the attack on standardization in the *Milk Can* case was accompanied by allegations of price fixing and restraint of production by means of other more serious methods, one cannot state positively what the result would be of a complaint addressed to standardization alone. I do not believe that a court would hold that trade and commerce had been restrained by the incidental elimination of "competition in the

attractiveness of products to buyers". I think the courts would hold that such restraint, if any, was a restraint of trade under the rule of reason.

Whether the Federal Trade Commission will ever bring a complaint based upon that type of restraint alone and what conclusion the Commission would reach remains to be seen. The language in the Milk Can case indicates that the Commission believes standardization for the purpose of eliminating competition in the attractiveness of their products to be a violation of law. It is impossible to tell from the Milk Can case whether the Commission really believes that. One word of warning is appropriate. If the Commission should bring a proceeding and issue a cease and desist order based upon such a restraint, it is doubtful whether the court would upset an order of the Commission in view of the well known rule that the Commission's conclusions are conclusive on appeal if supported by substantial evidence.

"Standardization" Needs Exact Definition

One of the greatest sources of confusion and doubt on this question of the legality of standardization arises from the looseness with which the term "standardization" has been used. Perhaps I should have defined the term at the beginning of my talk, but it seemed to me that it would be more advisable to leave you with a proper, exact definition. A standard is a "definition of a product or process with reference to composition, construction, dimension, quality, operating characteristics, performance, nomenclature, and other like factors". And standardization, as I have used it here, is "the formulation of such definition or standard". Standardization has nothing to do with an agreement to adhere to the standard so formulated and it behooves every association engaged in this type of activity to make clear beyond question both to its members and to the public generally that the promulgation of a standard or standards by it does not preclude any member or non-member from making his own determination as to whether or not he will manufacture in accordance with the standard.

Of course, it is natural that a manufacturer who has taken part in setting up standards will in all probability manufacture in accordance

with the standards. As long as each manufacturer freely, voluntarily, and in good faith does this, whatever restraint of trade results is incidental and is far outweighed by the economic benefits accruing to consumers, distributors, and manufacturers from a standardization program. It is only where the freedom of the individual has been taken from him by an agreement express or implied to adhere that the restraint becomes direct rather than incidental.

Voluntary Nature of Standardization Eliminates Use of Compulsion

A natural corollary of the voluntary character of standardization is that an association engaged in standardization activity take no steps to compel compliance with its standards. This, of course, does not mean that the association cannot investigate to see whether its standards are being followed—for the purpose of ascertaining and verifying the validity of the standards and the possible necessity of amendment. Such activity is proper if carried on in good faith. Members are not likely to be confused as to the real purpose of any investigation along these lines.

How the Party-at-Interest Procedure of ASA Affects Legality

There is a question related to the voluntary use of standards of special interest to this group. This question has not yet been answered by legal decision, but in my opinion it can have but one answer. That question is, "Does the procedure of the American Standards Association, in which all parties at interest are represented in the development of a standard, change the picture as far as the legality of a standard is concerned?" Although there has been no legal ruling on such a question, it is my opinion that this procedure does give a standard greater protection than if the standard is developed by a private group. If a standard is arrived at after consulting not only the interests of the manufacturers but also of the marketers of the product, of the consumers of the product, and of the government agencies, if any, which may be interested in the use or disposition of that product, then whatever restraint results from the adoption of that standard would, in my opinion, be reasonable. I do not believe it could ever be successfully attacked.

One should not infer, however,

from the fact that a government agency has participated in any way in the adoption of a standard that the standard so adopted carries with it any license to violate the law in the use of that standard. This is true even though the government agency might request that the particular wrongful conduct be done. If, for example, a government agency should ask an industry to adhere to the standard and not to manufacture articles which do not comply with the standard and if, pursuant to such request the industry should so agree, the agreement thus made would still be subject to attack. The reason is that no government official no matter how highly placed has the authority to authorize any individual or group of individuals to violate the law or to invite them to do so.

Confusion Equally Great on Status of Simplification

Finally, I should say a word about simplification. The confusion on this subject is even more extensive than on standardization and again arises primarily from the wide variety of activities that has been called simplification. Everything that I have said regarding standardization applies to simplification, as I define simplification.

Simplification is "the formulation of standard product lines consisting of types, sizes, shapes, grades, colors, and varieties of product most frequently demanded by consumers".

Same Limitations Apply to Simplification

What I have just defined as simplification is sometimes called type standardization. It has also been defined as an agreement to eliminate in accordance with agreed product lines. The same limitations that apply to standardization also apply to simplification. It is legitimate for an association to formulate standard product lines and as an integral part thereof for competitors to agree on what standard product lines should be. Just as in the case of standardization, it is illegal if the program is misused in order to fix or raise prices, restrict production, or eliminate competition, and it is obvious that an agreement by the participants in such a plan to adhere to the standard product lines and to limit their manufacture thereto is an illegal restraint of trade.

Keeping Elevators Safe

By John A. Dickinson

Secretary, ASA Sectional Committee on Safety Code for Elevators, Escalators, and Dumbwaiters; Chief of the Section of Safety Codes, Assistant Chief of the Division of Codes and Specifications, National Bureau of Standards

Up-to-date information on best methods for maintaining elevators in safe condition is given in new edition of Elevator Inspectors' Manual, based on inspectors' experience

THE best safety code in the world is of little value unless it is backed up by intelligent inspection and enforcement and by proper maintenance on the part of owners of the equipment. These facts were recognized by the sectional committee which prepared the Safety Code for Elevators, Dumbwaiters, and Escalators under American Standards Association procedure sponsored by the American Institute of Architects, the American Society of Mechanical Engineers, and the National Bureau of Standards. A special subcommittee was set up to prepare an inspectors' handbook or manual which would serve as a companion volume to the code itself. Since there are many ways of making an inspection, it obviously was not desirable to draft this material in code language but rather in the form of a description of the operation covered under a particular heading.

The subcommittee chosen to prepare this work was unique in that every man serving on it had served for years as a field inspector, maintenance mechanic, supervising engineer's representative, or as chief of a laboratory where elevator equipment was tested. Further, this group had at its command the experience and engineering services of several elevator manufacturers, a number of the larger insurance companies, and inspectors from city and state enforcement groups in areas where the "elevator population" was dense; this in addition to several "top notch" men from the Federal Government.

Subcommittee Contacts Used To Obtain Inspection Forms

The exceedingly good contacts of this subcommittee were utilized to the fullest in obtaining inspection forms

from various sources, in having outstanding inspectors in each field prepare a written description of just how each one would go about making an elevator inspection, and in collecting many special ideas and items which had their part in making the manual valuable to men in the field.

The preparation of this manual took several years of intensive effort, but its reception, when it was published in 1937, was such as to repay the committee for its effort. A number of suggestions for additional material were received. When, in 1940, it was decided to drop all work on the revision of the code and to issue, in lieu of the 1943 edition, a few necessary changes and the interpretations authorized since the last revision, it was also decided to revise the Inspectors' Manual to bring it into accord with the reprinted code and to add such pertinent material as might be available.

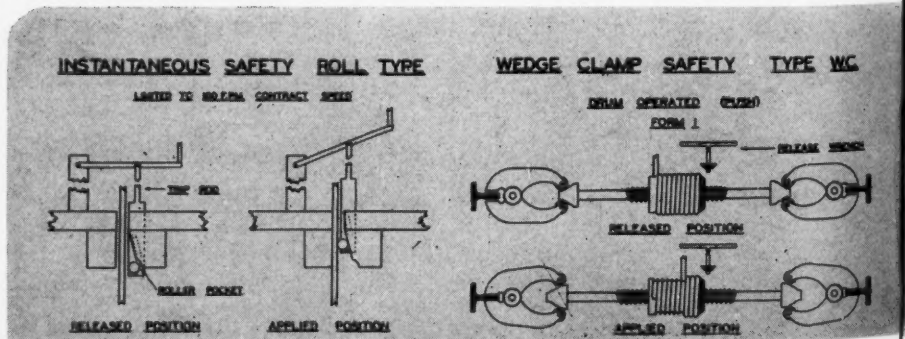
Maintenance Bulletins Help in Wartime

Immediately following our entrance into World War II, parts and equipment became almost unobtainable. In an effort to assist owners of such equipment to get the maxi-

mum possible life from their hoisting and governor ropes, brakes, etc., a series of short maintenance bulletins were prepared and published as National Bureau of Standards circulars C441 to C444.¹ These circulars were entitled respectively, *Elevator Wire Rope Maintenance*, *Maintenance of Elevator Mechanical Safety Appliances*, *Maintenance of Elevator Hoistway and Car Enclosures and Equipment*, and *Maintenance of Elevator Hoisting Machines and Brakes*. These bulletins were also published by The American Society of Mechanical Engineers in *Mechanical Engineering*. The material in them proved to be of such interest that it was decided to include most of it in the revised manual.

Partly as a result of the publication of Circular C442 and partly as a result of the influx of untrained or partly trained men in the inspection field, there arose a demand for a publication which would give information on the various types of under-car safeties which these men might encounter in their work. It was suggested that this might be issued as

¹ These may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for 5¢ per copy.



The New Elevator Inspectors' Manual, approved by the American Standards Association as American Standard A17.2-1945, has just been made available to the public by the publisher, The American Society of Mechanical Engineers. It sells for \$1.25 per copy. ASA Members are entitled to 20 percent discount when buying copies from the American Standards Association. Appendices No. 5, "Description and Schematic Layouts of Various Types of Under-car Safeties and Governors", and No. 6, "Handling and Socketing of Wire Rope", are also published separately and may be obtained from the same sources at 40 cents for No. 5 and 25 cents for No. 6, or both for 50 cents.

maintenance bulletin No. 5. A bulletin on socketing of wire rope was also suggested and was finally undertaken.

The most logical method of presenting the material on under-car safeties seemed to be by means of schematic diagrams showing, in a very simple form, the principal operating parts, with a brief description of the device on the page facing the diagram so that the entire story is available on two facing pages. The committee decided to make this bulletin and the one on socketing of wire rope a part of the Manual. They are included as Appendices 5 and 6 and are also printed separately.

The committee spent considerable time in working out the material for these bulletins and in revising and augmenting the material in the body

of the Manual itself. One of the useful items included in the new edition is a sketch showing the measurements to be taken and the formulae to be used in computing overhead and pit clearances. This should eliminate any doubt as to how and where measurements should be taken, and should serve to standardize the method of making such measurements and computations.

This Manual is not intended to serve as a code or eliminate the need for regulations, but is offered with the hope that it will result in the maintenance of the equipment in a safe and satisfactory operating condition. It is intended to be used by city and state inspectors, insurance inspectors, mechanics employed by maintenance companies, and employees of building owners who do work of this kind.

The sectional committee feels that it is as important to keep elevators safe as it is to see that the equipment is safe when it is installed. It is hoped that the revised Inspectors' Manual will aid in "keeping elevators safe".



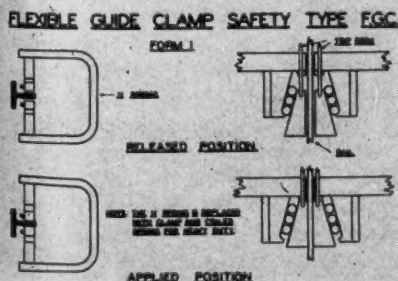
Top view of basket after pouring



Turned ends pulled into basket ready for pouring



Close-up of bottom of basket showing babbitt



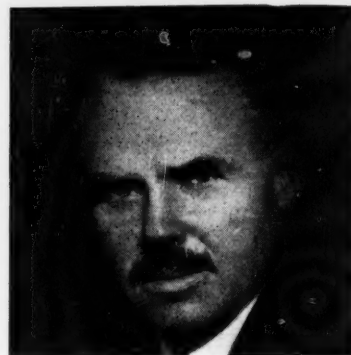
Above:—Socketing of wire rope is one of the subjects included in the Manual for the first time.

Left:—Some of the schematic diagrams for under-car safeties in the new edition of the Inspectors' Manual

Committee that Prepared Elevator Standards Represents Different Parties at Interest

Organizations representing operators of elevators, inspectors, insurance companies, manufacturers, and state and federal government departments are members of the ASA Sectional Committee on Elevators, Escalators, and Dumbwaiters, A17, that developed both the American Standard Safety Code and the Elevator Inspectors' Manual. The committee worked under the sponsorship of the American Institute of Architects, the American Society of Mechanical Engineers, and the National Bureau of Standards. Members of the committee are:

- Sullivan W. Jones, American Institute of Architects and National Elevator Manufacturing Industry, Inc, *Chairman*
 J. A. Dickinson, National Bureau of Standards, *Secretary*
 American Hotel Association of the United States and Canada, *Georges C. St Laurent*
 American Institute of Architects, *Sullivan W. Jones; Dexter J. Purinton; S. F. Voorhees; Cecil I. Cady (Alternate)*
 American Institute of Electrical Engineers, *George H. Reppert; A. W. Paulson (Alternate)*
 American Society of Mechanical Engineers, *Joseph W. Degen; D. L. Holbrook; Bassett Jones; H. F. Richardson (Alternate); W. H. Seaquist (Alternate)*
 Federal Works Agency—Public Buildings Administration, *Henry A. Roettiger*
 International Association of Fire Chiefs
 International Association of Government Labor Officials, *John C. Ready; J. R. Copenhagen (Alternate)*
 International Association of Industrial Accident Boards and Commissions, *George P. Keogh; Frederick Pavlicek, Jr (Alternate); C. George Krueger; P. E. Sugg*
 National Association of Building Owners and Managers, *Lewis W. Mauger*
 National Association of Mutual Casualty Companies, *K. A. Colahan*
 National Bureau of Standards, U. S. Department of Commerce, *J. A. Dickinson; W. F. Stutz; H. L. Whittemore; Stewart J. Owen, Jr (Alternate)*
 National Conservation Bureau, *Walter S. Paine; James L. Keane (Alternate)*
 National Electrical Manufacturers Association, *E. W. Seeger; William E. Date (Alternate)*
 National Elevator Manufacturing Industry, Inc, *E. M. Bouton; E. B. Dawson (Alternate); C. R. Callaway; Orrie P. Cummings; Martin B. McLaughlin; F. L. Ohler*
 National Fire Protection Association, *Nolan D. Mitchell*
 National Retail Dry Goods Association, *John J. Cogan*
 National Safety Council, *A. J. Morgan; W. G. Henderson (Alternate)*
 Underwriters' Laboratories, Inc, *S. V. James*
 U. S. Department of Labor, *John F. Herrity; Edward D. Bieretz*
 Members-at-Large, *Patrick F. Foley; John G. Foley (Alternate); John J. Matson; C. A. Peters; Seymour L. Guthorn (Alternate); W. H. Saalfeld; Carl B. Mulvehill (Alternate); James G. Shaw; H. B. Sommer*



John A. Dickinson

Research Council Starts Program on Pressure Vessels

A comprehensive research program covering materials, design, fabrication, inspection, and testing of unfired pressure vessels has been started by the Welding Research Council, which is sponsored by the American Welding Society, American Society of Mechanical Engineers, American Institute of Electrical Engineers, and other engineering societies. This program has been initiated to answer the need for quantitative data by those engaged in pressure-vessel design and construction to insure sound design and reasonable life, the American Welding Society explains. During the war, experimental work had fallen behind the increased use of both carbon and alloy steels in larger and more complex designs of welded vessels used in process industries under increasingly severe service conditions. The lack of factual information has resulted in acknowledged over-conservatism in design and has hastened the start of the new research program, the Society states.

The chairman of the new Pressure Vessel Research Committee is Walter Samans, who is also chairman of the ASME Boiler Code subcommittee on unfired pressure vessels. The first meeting of the new committee was held on January 10 to determine which problems need first attention, based on reports of defects developed in service, and to plan coordination of the new investigations with other committees and with research already being conducted. At this meeting, employment of a full-time New York headquarters secretary was authorized to collect and maintain adequate records and to correlate the projects approved with the research facilities and personnel of selected university laboratories.

ASA Receives Navy Award For Safety Standards

THE American Standards Association, the National Fire Protection Association, and the National Safety Council were honored March 19 by presentation of the Navy's Certificate of Achievement.

The award was presented to the American Standards Association "in recognition of specialized accomplishment on behalf of the United States Navy and of meritorious contribution to the national war effort". The presentation was made at Navy Headquarters in Washington before a small group of dignitaries from the Navy Department and from the three organizations.

John L. Sullivan, Assistant Secretary of the Navy for Air, made the presentation which was received for the American Standards Association by Henry B. Bryans, president of the ASA and vice president of the Philadelphia Electric Company. Mr Bryans accepted it on behalf of the 94 national groups that make up the American Standards Association and of the many other organizations and individuals who assisted in the work on safety standards for which the award was given.

The citation reads as follows:

"This organization, upon whose Executive Board the Navy has representation, performed a commendable service to the Navy through the preparation and development of safety standards, codes, and specifications, many of which have been adopted by the Navy. This program of the American Standards Association speeded up the process of the development and preparation of such codes which otherwise would have involved considerable research and, most important, would have taken considerable time to prepare and develop, had the Navy undertaken such tasks without the aid, guidance, and assistance which the American Standards Association so ably rendered."

In accepting the award Mr Bryans said:

"I wish to express the deep appreciation of this Association and its affiliated organizations for this signal honor. In doing so, however, I am acting merely as a channel of transmission for the hundreds of individuals and groups who have actually done the work for which the award is made—for the safety standards upon which the award is based represent the work of thousands of devoted men and women. In these activities they have represented employer and employee, technical and industrial groups, and public bodies.

"It is a great satisfaction to all who have had to do with this constructive program of cooperation to know that the safety standards have been and are being effective in helping to cut down the immense toll of accidents in the factory and on the highways—a toll which, unfortunately, is comparable to that of great armies in actual warfare.

"During the war, this country gave the greatest exhibition of teamwork the world has ever seen. This included a closer and more effective cooperation between the armed forces and industry than ever before. One of the most important fields of such cooperation is that of standards. Representatives of both government and industry have worked together side by side in setting up standards which have been essential to the common effort and which have met extensive use in industry and government alike.

"It is of the greatest importance that this close teamwork continue in peacetime. In order to keep cost low and to keep government and industrial operations geared harmoniously together, it is necessary that as far as possible, all differences between government standards and general industrial standards for products used by both shall be eliminated by cooperative effort.

"It is a privilege to pay tribute to the United States Navy, and to express appreciation for the continuous and most effective cooperation the American Standards Association and its affiliated groups have received from the Navy for a quarter of a century."

Percy Bugbee, general manager, accepted the award for the National Fire Protection Association.

The text of the citation reads:

"This organization provided outstanding service to the Navy in the field of fire prevention and fire protection engineering dur-

ing the war period. Its staff members, as well as its technical and engineering resources, were placed at the disposal of the Navy, and were utilized with great effectiveness by the Navy Department and the Naval Establishment."

Sidney J. Williams, assistant to the president, accepted the award for the National Safety Council.

The text of the citation reads:

"This organization has made substantial contributions to the Navy Safety Program and the joint Navy-Maritime Commission Safety Program during the war period. The National Safety Council has contributed liberally the services of its staff as well as the preparation of technical and educational literature which has been widely disseminated through the Naval shore establishment."

Present at the ceremony in the Navy Department were Rear Admiral Frederick G. Crisp, USN, chief of the Office of Industrial Relations; Captain Paul M. Curran, USN, chief of damage control, and Captain William C. Latrobe, USN, Navy representative on the Standards Council, American Standards Association, both of the Bureau of Ships; Captain Harold K. Hughes, USN, chief of the Fire Protection Division, Bureau of Yards and Docks, and Navy representative for the National Fire Protection Association, and Commissioner John M. Carmody of the Maritime Commission.

Representatives of the American Standards Association present at the ceremony were E. C. Crittenden (assistant director of the National Bureau of Standards), chairman of the Standards Council; Cyril Ainsworth, technical director and assistant secretary of ASA, under whose direction the safety program was carried out; J. H. Courtney and Mrs. Frances S. Mong, of the ASA Washington office.

Buyers Want Descriptions and Grades, Inspected Foods Service Reports

THE consumer's preference for both an alphabetical and adjective grade label was indicated in the results of a recent survey conducted by the United States Inspected Foods Educational Service, New York, the Service reports. This organization attempted to determine exactly what type of information on labels of canned fruits and vegetables buyers themselves prefer. To secure useful opinion, the Educational Service mailed a study set, which included 17 representative labels from some of the member canners' brands, to each of 3,000 consumers, of four occupational groups, throughout the United States. Participants were to select the label which was considered most helpful in selection at the point-of-sale.

Miss Polly Gade, director, in announcing the analysis of the study, reported that a total of 34.4 percent of the consumers who were polled, responded. When the returns were tabulated, it was found that 74.4 percent prefer a label combining description, grade, and information as to use and preparation, while 85.3 percent want the selection data to be placed on one section of the label. This satisfied the association's contention that, to be most helpful, a label should include not one—but all—types of information in so far as space permits.

Members of the United States Inspected Foods Educational Service are canners who pack under the continuous inspection service of the U. S. Department of Agriculture.

Canners Association Urges Uniform Labeling Terms

Canners, distributors, and other organizations directly or indirectly engaged in merchandising canned foods are now being urged to use uniform labeling terms by the National Canners Association. This action is the direct result of a meeting of the Association in Atlantic City on February 3 where the Board of Directors approved the report of the Committee on Labeling, specifically sanctioning the labeling terms that had been selected and adopted by the committee and approved by the several distributor organizations. Secretary of Agriculture Clinton P. Anderson congratulated the Association and declared "You are on the right path and the Department of Agriculture is happy to see you moving in that direction."

Poll Shows Preference For 8½ x 11 Size Catalogs

A survey and poll of stationery dealers throughout the United States has just been completed by *The Modern Stationer* in an attempt to arrive at a uniform size for manufacturers' catalogs and price lists. With about 1,500 office supplies manufacturers putting out these catalogs and price lists in sizes ranging from 3 by 5 in. to 10 by 14 in., the average dealer has had great difficulty in filing any of them for future reference. The most obvious solution to the problem is the adoption of a standard size for all of these publications.

The Modern Stationer, in undertaking the survey, contacted the industry through direct mail to local dealers' associations, by discussion articles in recent issues of *Modern Stationer*, and by a post card ballot distributed to 3,000 dealers. An analysis of the poll showed that all who were canvassed unanimously agreed upon the need for a definite standard size; 94.8 percent voted for size 11 by 8½ in.

With most manufacturers ready to print new editions of their catalogs, *The Modern Stationer* believes that the foregoing information may serve as a valuable guide for producing the kind of publication which will have the greatest acceptance by the trade.

New Society on Quality Control to Help in Applying Statistical Methods

A NEW national society to help all those interested in statistical quality control has been established, with Edward M. Schrock, Pittsburgh Quality Control Society, as president. The Society for Quality Control, which has offices at 305 East 43rd Street, New York, intends to give particular attention to the needs of those engaged in manufacture and inspection, and to publish material that will help quality control people sell and apply quality control methods.

National Research Council's Subcommittee Started Organization

First steps for the organization of the society were taken by the Subcommittee on Quality Control of the Committee on Applied Mathematical Statistics of the National Research Council. This committee acted as a referee to bring about the election of an Organizing Committee for the new Society, which was completed by June 27, 1945. Since that time the National Research Council has had no further connection with the organizing committee, it is explained.

The Organizing Committee felt that all the problems connected with the establishment of a strong national

society could not be settled at one meeting. Therefore the Society has been set up as an interim organization to serve for not more than one year.

Local Organizations May Become Chapters of Society

Any local organization on quality control may become a chapter of the Society for the interim period by having its members join the national society, and by notifying the secretary-treasurer of the name and address of the representative selected.

An Editorial Board which will be responsible for issuing the publications of the Society has been appointed, made up of four industrial members and four academic members. Dr. W. A. Shewhart, internationally recognized authority on quality control, is one of the industrial members of the Editorial Board. Colonel Leslie E. Simon, Ordnance Department, U.S. Army, and R. E. Wareham, both members of the ASA War Committee on Quality Control, and A. E. R. Westman are the other industrial members of this Board. The academic members are I. W. Burr, L. A. Knowler, Frederick Mosteller, and E. G. Olds.

ASA Mining Committee Studies Need For Revising Standards

THE Mining Standardization Correlating Committee of the American Standards Association which coordinates standards in the mining field held its annual meeting February 28 in Chicago. Officers were elected for the coming year, and the standards under the jurisdiction of the committee were discussed. In many cases it was decided to review these standards to determine whether they need revision or should be reaffirmed as being up to date with current practice.

Daniel Harrington, chief of the Health and Safety Service of the U. S. Bureau of Mines, was re-elected chairman of the MSCC. Mr Harrington has served as chairman of the committee since 1938. Lucien Eaton, consulting engineer, representative of the American Mining Congress, and M. D. Cooper, division general superintendent of the Hillman Coal and Coke Company, representing the Coal Mining Institute of America, are vice chairmen. H. M. Lawrence, American Standards Association, is secretary.

The Executive Committee of the Mining Standardization Correlating Committee includes the officers listed above and the following members:

- W. T. Davis, Supervising Engineer, Ocean Accident and Guarantee Corporation, Ltd, representing the National Conservation Bureau.
- E. A. Holbrook, Dean, College of Engineering, University of Pittsburgh, Member-at-large.
- B. F. Tillson, Consulting Engineer, American Institute of Mining and Metallurgical Engineers.

The standards and projects discussed by the committee include:

Safety Rules for Installing and Using Electrical Equipment in Coal Mines, M2-1926—

Sponsors: American Mining Congress; U.S. Dept of Interior, Bureau of Mines.

A revision of this standard is being postponed until studies have been completed by several groups including, among others, the Coal Mining Institute of America and the Department of Mines of Pennsylvania.

Screen Testing of Ores (Hand Method), M5-1932—

Sponsor: American Institute of Mining and Metallurgical Engineers.



Sullivan Machinery Co.

This standard is used in laboratories as a reference method and although it is unlikely that changes will be made in it, the standard will be reviewed to determine whether it should be re-affirmed or revised.

Drainage of Coal Mines, M6-1931—

Sponsor: American Mining Congress.

A review of this standard is being made in light of new developments and with reference to recent laws governing the drainage of coal mines.

Coal Mine Tracks, Signals, and Switches, M7—

Sponsor: American Mining Congress.

Two approved standards covering frogs, switches, and turn-outs for coal-mine tracks for 20 to 80-lb rails are under consideration to determine whether a review is desirable. The question of whether other standards should be developed under this project is also being considered.

Coal Mine Ventilation, M8—

Work has been going on at intervals



since the early 1920's toward the development of a proposed standard. A proposed code which reached the draft stage in the middle 1920's was subsequently reviewed and adopted by the American Institute of Mining and Metallurgical Engineers in 1936. This standard was submitted to the ASA for approval. However, it was found that a consensus could not be reached of all the organizations concerned and work on the proposed standard was stopped. It was recommended by the Mining Standardization Correlating Committee at its meeting February 28 that the project be discontinued with the understanding that if work in this field appeared desirable at any time in the future, the MSCC would reconsider the subject.

Miscellaneous Outside Coal-Handling Equipment, M10-1928—

Sponsor: American Mining Congress.

A first draft of a proposed revision of this standard is being prepared for circulation to the sectional committee. The committee was re-organized recently.

Wire Ropes for Mines, M11-1927—

Sponsor: American Mining Congress.

It was agreed that a revision of the 1927 edition of this standard should be undertaken. In preparing such a revision, it is expected that consideration will be given to Simplified Practice Recommendation R198-43, issued by the National Bureau of Standards at the request of the War Production Board, and also to a draft standard prepared by the Wire Rope and Strand Manufacturers Association. Reorganization of the sectional committee is now under way.

Ladders and Stairs for Mines, M12-1928—

Sponsor: American Mining Congress.

A proposed revision of this 1928 edition is being submitted to letter ballot of the Mining Standardization Correlating Committee.

Rock Dusting of Coal Mines, M13-1925—

Sponsor: American Institute of Mining and Metallurgical Engineers.

This standard was re-affirmed as being up to date with current practice in 1942.



Charles Phelps Lushington

The committee now plans to review it again to determine whether it should be revised. It is expected that the sectional committee will be reorganized if a revision is undertaken.

Fire-Fighting Equipment in Metal Mines, M17-1930—

Sponsors: American Mining Congress; National Fire Protection Association.

This standard, which has been used by metal-mining companies in the west and southwest, is to be reviewed before it is decided whether suggestions for a revision are to be taken up with the sponsors.

Specifications for Coal Mine Cars, M21 and Specifications for Mine Timbering, M22—

Sponsor: American Mining Congress.

It was unanimously voted to discontinue these two projects until such time as a real demand for standards becomes evident.

Safety Rules for Installing and Using Electrical Equipment in Metal Mines, M24-1932—

Sponsor: American Mining Congress.

Discussions are being held to determine whether this standard is up to date and should be reaffirmed or whether a revision should be undertaken.

Trolley Storage Battery, and Combination-Type Locomotives for Coal Mines, M25—

Sponsors: American Institute of Electrical Engineers; American Mining Congress; National Electrical Manufacturers Association.

Inquiries are being made to determine whether there are any proposals for standards that could be used by the committee as a basis for work on this project.

Safety in Quarry Operations, M28—

Sponsor: National Safety Council.

It was decided that the scope of this project should be limited to safety provisions for quarry operations, and should not include strip and open-pit mining operations as originally set up. A pamphlet presenting standards and recommended practices for quarrying is in course of preparation in the National Safety Council.

It was announced that H. H. Otto, Hudson Coal Company, Scranton, Pennsylvania, is the new representative of the American Institute of Mining and Metallurgical Engineers on the Mining Standardization Correlating Committee. C. B. Foraker, Magma Copper Company, Superior, Arizona, is his alternate.

The U.S. Department of Labor has named R. P. Blake, senior safety engineer, Division of Labor Standards, as its representative on the MSCC; with John Sandel, Division of Labor Standards, as his alternate.

Wisconsin Agricultural Interests Ask for Grade Certification

Interest is increasing in Wisconsin in capturing quality markets and premium prices through the certification of products according to grade, declares an article in the *Journal of Commerce* recently. Agricultural producers are making requests for the grading services of the State Department of Agriculture, the announcement declares. Fruit and other produce-marketing farmers, producers of some of the increasingly profitable canning crops, the potato growers, and even the farmers who ship hay outside the state are asking for the grading aid of the state division of markets, it states.

Over the years a grading service has been worked out which is paid for in large part by the producers. During the war years and today there are more requests for grading than the department can fill because of the acute shortage of grading specialists, the *Journal* states. Gradually, the State Department's grading staff is being restored and expanded. Work has been begun on the grading of cash crops before they are sent to market. An example of this is hay grading, mostly in the Oshkosh and Green Bay areas.

Of long standing is the grading program in the dairy industry, it is explained. There is now a compulsory state-grading program for Swiss cheese and a system of plant grading under state supervision for the big Cheddar-cheese industry.

Oil Association Plans Book of Standards

Much progress has been made in the standardization of essential oil and aromatic chemical specifications by the scientific section of the Essential Oil Association, according to an announcement at the annual meeting held recently. Unanimous agreement has been reached on three standards covering hydroxycitronellal, spike lavender oil, and oil petitgrain, the announcement declared. Now under consideration are proposed standards for oils of lemon-grass, rosewood, terpineol, vanillin, heliotropin, and terpinyl acetate in connection with the Association's plan for formulating an essential Oil Book of Standards.



Book Reviews

Selection of Steel for Welding.

By Dr. Samuel L. Hoyt. (American Welding Society, 33 West 39th Street, New York 18, N. Y. 50¢.)

This ten-page article by Dr. Hoyt discusses the fundamentals of welded construction, covering such problems as why steel selected for welding should be chosen for "welding quality". This term, it is explained, includes not only weldability but also the qualities needed for service after fabrication. Several typical examples of welded construction are cited and the problems involved in the selection of steel for each are explained.

Also discussed are three-dimensional stress systems created by welded fabrication, as compared to stress conditions in riveted assemblies, and the need for "cohesive strength" in steels used for welded construction to eliminate possibility of brittle failures. The article suggests that tests and specifications for steel which are satisfactory for riveted construction may not be entirely satisfactory in selecting steel for welded construction, and that "cohesive strength" and notch brittleness are closely related.

Inspection Handbook for Manual Metal-Arc Welding (American Welding Society, 33 West 39th Street, New York 18, N. Y., \$1.50)

The American Welding Society has compiled this new handbook which is intended to serve as a reliable source of information on any welding inspection problem. It covers the requirements and duties of a welding inspector, methods of testing welds, and contains a comprehensive description of weld inspection by visual, magnetic-particle, and radiographic methods. One section of the book discusses the principal types of weld defects and indicates how they may be detected and corrected.

Propose Study of Packaging To Use Wartime Standards

IT was the standardized materials-handling program which effected numerous savings for the Navy in speed, man power, money, and equipment; and it was the use of standard specifications such as those adopted by the Joint Army-Navy Board which insured receipt of goods in perfect condition upon arrival. This is the opinion of two competent authorities who advocate the need for application of both of these methods to private industry in a pamphlet entitled *Modern Package Production*—Number 14 of the Packaging Series—recently published by the American Management Association. Originally presented at the Local Packaging Conference of the AMA, held at the Hotel New Yorker in September 1945, the ideas suggested seemed to the Association to be of special interest and has, therefore, printed them, along with several other important articles, in pamphlet form. The two papers most pertinent to standardization are summarized below.

Emphasis on "Line Production" Before War

The first, written by Commander Boyd R. Lewis of the Navy Bureau of Supplies and Accounts, is entitled "Modern Materials Handling and Warehousing Methods". He states that in the peacetime era before the war most of the emphasis within industry was placed upon "line production" and "line assembly"—shortcuts to manufacturing the finished item—while little attention was given to the packaging of that same item when it was completed.

With the advent of war, our problem of distribution of supply was tremendously increased. The accelerated rate of production soon necessitated a revision of old methods of materials handling and a consideration of new forms to expedite the flow of equipment to acute battle areas.

It was one of the Navy's tasks to find a solution for this gigantic problem of movement and the answer was soon forthcoming. In essence, it consisted of these five steps:

(1) Mechanized handling was instituted, and the right equipment for the job.

(2) A uniform Navy materials-handling program was established so that all activities would be operating on the same standards; such as, standardization of the size of the pallet, its design, material, and method of manufacture; standardized equipment and the training of equipment operators; standard methods of warehousing.

(3) A unit load was prepared at the Naval contractor's plant which was shipped as a unit right through to the advanced base.

(4) All inter-depot shipments were also unit loaded.

(5) Proper stevedoring methods and equipment were introduced.

According to Commander Boyd, such a valuable system definitely should have an application to industry today; especially when the post-war period promises to bring even more export trade than ever before. This is the time to investigate the efficiency and lowered costs which standardization of materials handling has provided, he declares.

H. T. Holbrook, manager of the Packaging Materials Division, Bulkley, Dunton and Company, has written the second article entitled "Latest Developments in Army and Navy Specifications".

The situation facing the packaging industry today has taken on many complexities now that numerous military contracts have been cancelled, he explains. The first reaction is to get away from the wartime emphasis upon protection. Great stress is now being placed upon eye-appealing designs, attention-getting devices, and speed-up in packaging operations. All of this is a natural trend but, Mr Holbrook declares, in addition to meeting the needs of peacetime manufacturers, the industry must still recognize the Government as one of the prime customers as it begins its postwar planning. Adequate protection must still be provided for shipments being redeployed to the United States similar to that which was provided in contractors' plants and in government depots when shipments left the country. Here at home, vast quantities of matériel are being returned from post camps and stations. This, plus the supply on hand in depots, may require reprocessing and repackaging. War reserve equipment which is to be "spotted" at strategic points through-

out the world, and which will be subjected to hazardous conditions of weather and travel, must be ready for use on short notice if it is to be part of the nation's preparedness program. The main function of any package is still to deliver the merchandise in perfect condition from the point of manufacture to the ultimate user.

What Part Will Joint Army-Navy Specifications Play?

With the sudden change in the supply and demand for war-package materials, it is interesting to speculate upon what part the Joint Army-Navy Specifications will play in future packaging programs, Mr Holbrook believes. During the war, these specifications provided the basis for all of the packaging of war equipment which was the major part of all packaging throughout the industry. Certain basic standards and criteria of performance were established for protective packaging because of these JAN specifications which, according to Mr Holbrook, still provide the only truly comprehensive and reliable guide for the industry. In his opinion, there is a definite need for specifications in peacetime. In the past, very often the only difference between the acceptability of American merchandise and that of the British or German products has been the difference in the condition of the merchandise upon receipt at point of delivery. The JAN specifications, in Mr Holbrook's estimation, provide the most-up-to-date standards now available.

It is his hope that the services or some other technically qualified group will be willing and able to keep these specifications up-to-date and to make them reflect the latest advances in packaging technology until the time when the packaging industry can establish its own technical headquarters.

Adopts American Standard For Power Circuit Breakers

The American Institute of Electrical Engineers has withdrawn the Institute's standard No. 19, A-C Power Circuit Breakers, in favor of the American Standards for Alternating-Current Power Circuit Breakers, C37.4-1945 through C37.9-1945.

War Experience Helps in Standards On Gear Tolerances and Inspection

By Granger Davenport

New American Standard covers spur and helical gears, bevel and hypoid gears, and backlash in gears; culminates years of work

IT IS fortunate that at the start of the war the standardization of gear tolerances had made considerable progress, even though it had not yet become American Standard. Information on this subject in the form of tables had been made available to gear manufacturers as well as having been published in the technical press. Many newcomers in the gearing field—designers, gear manufacturers, users—had access to this information, and were able to utilize it to good advantage, either directly in its original form, or suitably modified for particular applications.

As the war progressed, the tremendous production of all kinds of gears, ranging from fine instrument gears to large ship-propulsion gears, afforded an excellent opportunity to improve and extend the project, until it was ready to propose as an American Standard.

The new American Standard on Gear Tolerances and Inspection, B6.6-1946, is made up of three parts—Section 1, Spur and Helical Gears; Section 2, Bevel and Hypoid Gears; and Section 3, Backlash in

Gears. It includes gears ranging from $\frac{3}{4}$ inch to 100 inches in diameter, and from 1 to 32 diametral pitch, with a wide choice of tolerances varying according to several speed and accuracy classifications.

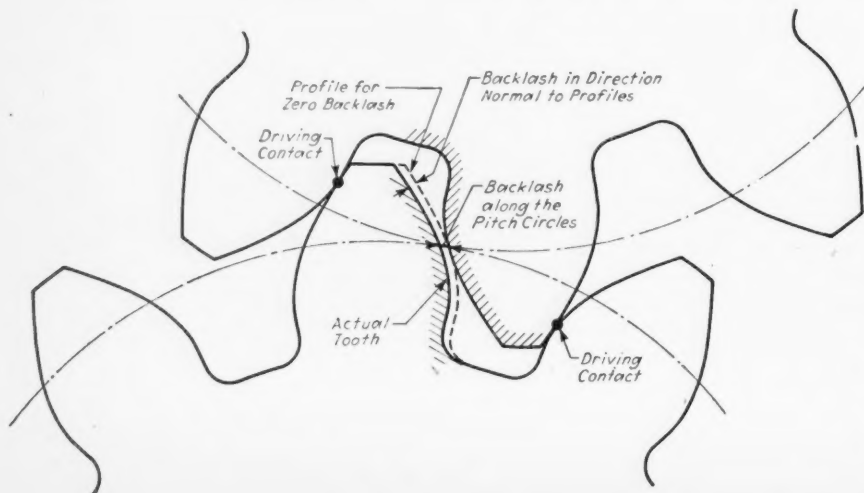
At some future date it is expected that sections will be added to include worm gearing, gear-blank tolerances, measurement over pins, master gears, and fine-pitch gears. Some of this material is already developed and in use as standards of the American Gear Manufacturers Association.

The present section on backlash supersedes the American Recommended Practice on Backlash for General Purpose Spur Gearing, B6.3-1940, which applied only to spur gears. The principal change is that backlash is now specified in a plane of rotation rather than normal to the tooth profile, thus making the table of backlash applicable to other kinds of gears besides spur. The relation of these two methods of measuring backlash is shown in the following illustration reproduced from the new standard.

The project to establish gear tol-

erances originated in the Gear Inspection Committee of the American Gear Manufacturers Association about eight years ago. The committee soon learned that gear-tooth tolerances were (and still are) a highly controversial subject for a number of reasons. Among these are the widely varying methods of inspection in different plants, the common use of various combined checks in which the individual errors are not separable, and in many cases the complete lack of inspection facilities by either gear maker or user. Then, too, certain types of errors, such as error in pressure angle or lead, can often be readily compensated by the shop man who introduces similar errors into the mating gears and obtains just as satisfactory results as though the pressure angle or lead

Granger Davenport, assistant chief engineer, Gould & Eberhardt, Inc., is chairman of Subcommittee 9 on Inspection of the Sectional Committee on Standardization of Gears, B6. This committee works under the sponsorship of the American Gear Manufacturers Association and the American Society of Mechanical Engineers.



Backlash is now specified in a plane of rotation rather than normal to the tooth profile in the new edition of the American Standard for Gear Tolerances and Inspection. This makes the table of backlash applicable to other kinds of gears as well as spur gears. The relation of these two methods of measuring backlash is shown in this illustration, which is Fig. 3 in the standard.

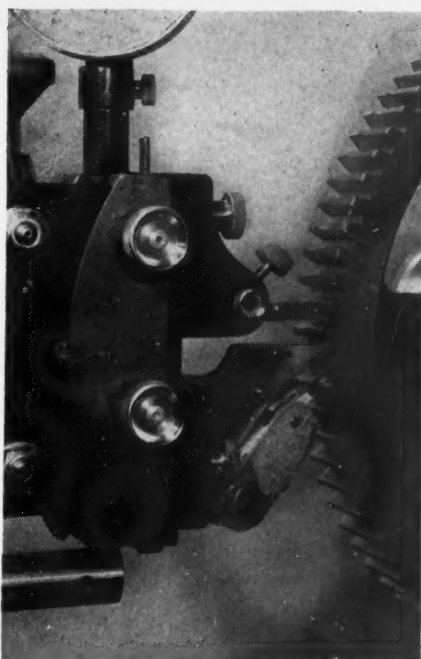
were strictly according to drawing specifications. This is as it should be, yet it is certainly not a valid argument against establishing gear tolerances and inspection methods, for in all the sciences, man's progress has gone hand in hand with his ability to measure.

As would be expected in starting a task of this sort, the committee first gathered all possible information from publications, gear suppliers, gear users, and manufacturers of gear-cutting machines and checking instruments. It was soon evident that data from these sources, while perhaps satisfactory for certain limited gear applications, were far from being an adequate basis upon which the committee could formulate a standard. The British Standards covering spur, helical, and bevel gears were carefully studied, and although they contain excellent data on gearing in general, their tables of tolerances were for the most part entirely too liberal to meet the standards of gear accuracy prevailing in the United States at the time. Consequently, it was necessary to start almost from scratch to build up the present tables of gear tolerances.

When tentative tables of tolerances had been established, it was found that they were of little use until accompanying definitions, illustrations, and descriptive methods of testing were added, all of which now swell the standard into a practical treatise on the subject of gear inspection. The section on backlash, particularly, contains much new information that had never been correlated and publicized before.

One very controversial issue centered on whether to include the composite check and suitable tables of tolerances. This is an inspection method in which the gear is rolled tightly in mesh with a master, and changes in center distance observed or recorded on a chart. In the end, this test was omitted, mainly for the reason that to include it would have greatly lengthened and complicated the standard, although its value as a routine check for mass production is widely recognized. Moreover, it is only practical for gears of relatively small size in comparison with the large range of diameters covered by this standard.

When each individual section was completed in tentative form, it was given wide circulation. The many comments received were indicative of a lively interest on the part of both gear makers and users, and



Inspecting a spur gear for pitch error

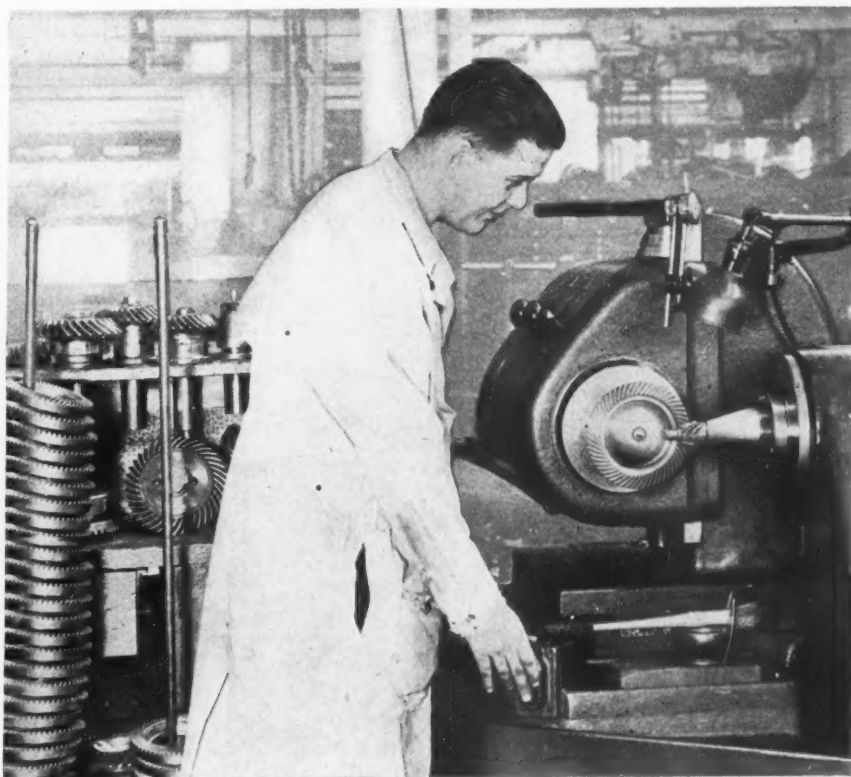
particularly of the need for such standards. Finally, each section became an AGMA Standard, and each was published in one or more trade magazines. Since June 1943, the material has been available in printed form as a Proposed American Standard sponsored both by the AGMA and ASME, and about 500 copies

circulated for comments and criticism.

In spite of all this publicity and several years of practical application, it is not claimed that this standard is perfect. Many changes will be required from time to time as progress is made in the manufacture, inspection, and application of gearing.

Neither is it claimed nor intended that these tolerances are to form a rigid specification for gear accuracy. Rather it is emphasized that ultimate performance is the final criterion in the acceptance or rejection of gears. But when gears fail to perform properly, definite inspection methods and tolerances prove an invaluable aid in locating the cause and overcoming the difficulty. And last, but not least, the gradual trend toward manufacture of more and more gears on an interchangeable basis, and demands for quieter and smoother gears, and higher load-carrying capacity, call for maintenance of gear tolerances within ever closer limits.

The American Standard on Gear Tolerances and Inspection, B6.6-1946, is being published by the ASME. Copies will be available within the next few weeks at 65 cents each.



Checking tooth contact on a spiral bevel gear

National Fire Protection Association Reports on Work of Committees

Committees, including some of those organized under procedure of ASA, take action looking toward completion of standards

FOLLOWING the mid-winter meeting of the Board of Directors of the National Fire Protection Association in New York City January 28, several NFPA committees met to consider possible revisions of present standards and codes. Of special interest to the ASA are the following summaries of the meetings of the committees on Dust Explosion Hazards (ASA Z12), Special Extinguishing Systems, Magnesium (ASA C5), and Blower Systems (ASA Z33). In addition to these, an Escalator Conference, jointly sponsored by the NFPA Safety to Life Committee (ASA A9) and the ASA Elevator Safety Code Committee (ASA A17), met informally. (Committees identified by ASA symbols also work under ASA procedure.)

Dust Explosion Hazards—

Hylton R. Brown, senior engineer of the Bureau of Mines, presided as chairman of a meeting at which the revisions in codes for the prevention of dust explosions in various industries were agreed upon in order to keep the codes up to date. The subcommittees on Terminal Grain Elevators, Flour and Feed Mills, and Electrical Metal Powder Plants reported several amendments to existing standards requiring revision before they are referred for action to the 1946 NFPA annual meeting. The committee viewed motion pictures of explosion-venting tests at the Bureau of Mines Laboratories which are useful in the determination of explosion-venting requirements. Part of the meeting was given over to the discussion of dust explosion hazards recently found to be present in several operations, including the grinding of tung kernel meal, the grinding of dried citrus peel, rice-drying operations, peanut cracklings, and coffee-roasting hazards. The chairman announced that helium is now available at \$13 per thousand cubic feet plus delivery charges.

Special Extinguishing Systems—

A. L. Cobb served as chairman of this meeting which was devoted pri-

marily to a revision of the present tentative standards of the NFPA on water spray extinguishing systems, looking toward the submission of a revised standard for official adoption at the 1946 NFPA annual meeting.

Magnesium—

This committee held its organizational meeting under the chairmanship of Hylton R. Brown with the assistance of the secretary, E. W. Fowler of the National Board of Fire Underwriters. A program was developed for needed research in this field and for the preparation of an informative report which the committee is to have ready for submission to the 1946 NFPA annual meeting.

Protection Against Lightning—

With W. W. Lewis of the General Electric Company acting as chairman, this committee held its first meeting since its reorganization under the joint sponsorship of the NFPA, the National Bureau of Standards, and the American Institute of Electrical Engineers. Various revisions of the Lightning Code were considered. It was voted to submit to the NFPA at the 1946 annual meeting, for official approval, Part III of the Code which covers lightning protection for structures containing flammable liquids and gases.

Blower Systems—

A complete revision of the NFPA Standards on Blower and Exhaust Systems was agreed upon by this committee, meeting under the chairmanship of Winthrop M. Jones. A new section of the standards will cover the troublesome problem of the installation and protection of ducts exhausting greasy vapors from above restaurant ranges. The committee proposes that portable carbon dioxide or dry powder extinguishing equipment be recommended for the protection of such ducts in lieu of steam jets. It is expected that a complete revision of the standards, with the possible exception of the section dealing with air conveying



Factory Mutual Laboratories; General Electric;
Charles Phelps Cushing

Top—Test being conducted to study the behavior of fires in finely divided magnesium. Such information is used by the committee on prevention of dust explosion hazards. Center—Revisions of the Code for Protection Against Lightning are being considered. Below—A magnet controller of a passenger elevator. The committee on the Elevator Safety Code is now considering escalator installations.

of combustible materials, will be presented for adoption this year.

Escalator Conference—

This conference, jointly sponsored by the NFPA Safety to Life Committee and the ASA Elevator Safety Code Committee, met informally to consider the influence of escalator installations on the two codes. The meeting was well attended by representatives of both committees. There was general agreement that escalator installations should only be permitted in structures of fire-resistive construction, protected with automatic sprinklers in those locations where combustible contents are present. It was also agreed that automatically operating horizontal shutters across the escalator openings were dangerous. It is expected that tests to determine the requirements for the protection of escalator openings through floors will be conducted in the near future through the cooperation of all those concerned with the provision of adequate safeguards to the public.

Fire Insurance Data To Be in Standard Form

After many months' study of basic information on which the nation's fire insurance business operates, a new system has been developed on a national basis which will provide, for general use, fire insurance experience data of greater breadth, accuracy, uniformity, and adequacy than ever before. The plan is known as the new standard classification plan and it replaces a plan in effect since 1932.

The importance of this to the public is that it will afford an improved statistical foundation for the business judgment of all kinds of companies in insuring, for the action of state authorities in regulating the business, and other purposes.

The plan divides premises primarily into four large over-all classes—by perils; by kind of occupancy; by fire protection; and construction. In the over-all occupancy classification, which includes all kinds of premises, are five classes of habitational risks; four mercantile; twenty non-manufacturing; sixty-five manufacturing; and five sprinklered classes. The classes under manufacturing risks are patterned after the divisions in the U. S. Department of Commerce Index of Business and Industry.

New Federal Specification For Motor Gasoline

A new motor gasoline specification, recently developed by the Technical Committee on Lubricants and Liquid Fuels of the Federal Specifications Board to replace the Proposed Federal Specification for Motor Fuel A, has been approved for use by the Director of Procurement. It has been issued as a Treasury Department, Procurement Division Specification and is designated as "Motor Fuel M", effective February 20, 1946.

The newly developed motor fuel specification is based upon the requirements of Government agencies

and the ability of industry to produce during this readjustment period, the Procurement Division announces. Although it may be revised when present uncertainties in manufacturing procedures are stabilized, it meets the minimum requirements of the Government and was developed after extensive inter-governmental and industry consultation.

It is anticipated that this specification will be examined at frequent intervals by joint meetings of Government and industry groups in an endeavor to adjust any features that are found inconsistent with satisfactory use or advances in refinery manufacturing techniques.

ASTM Committee Studies Methods For Testing Cathode Emissivity

Under the auspices of the American Society for Testing Materials, working through its Technical Committee B-4 on Electrical-Heating, Electrical-Resistance, and Electric-Furnace Alloys, a subcommittee (VIII) is studying important problems in connection with cathode emissivity. The membership, which is representative of the radio-tube industry, includes technical representatives from the various receiving tube companies, as well as other interested industrial organizations, colleges, and Government laboratories.

It is the aim of this committee to find a method for testing cathode base metal emissivity which will eliminate the large number of variables occurring when regular tube tests are run. As a first step, nine companies are cooperating in testing a standard diode structure. By picking materials with extremes of re-

sults, it is expected that information will be obtained through chemical or metallurgical methods which will permit accurate forecasting of results. Tentative standards will be established to provide improved methods of test required by the electronics industry. An important result of this work should be improved material specifications and manufacturing methods which will assist in the production of radio receiving tubes, the ASTM announces.

In addition, recent action has been taken by the Society to approve eight recommendations submitted by Committee B-4. Of these, three are new tentatives: the Test for Strength of Welded Joints of Lead Wires for Electronic Devices and Lamps (B 203); the Test for Surface Flaws in Tungsten Seal Rod and Wire (B 204); and determining of wire diameter by weighing methods (B 205).

McKeeman Joins Staff of Heating Engineers

The appointment of Clyde A. McKeeman as assistant to the president of the American Society of Heating and Ventilating Engineers has just been announced. He will represent the Society in securing the interest and participation of industry in the Society's research activities.

Mr McKeeman is a native of Maine, having obtained his BS degree in mechanical engineering from the University of Maine in 1923 and his MS degree from Harvard Uni-

versity School of Engineering. He started his engineering career with the Westinghouse Electric Company. Since that time his work has been mainly in the heating, ventilating, air conditioning, and power plant field. He has served as a consultant in the design of heating, ventilating, and cooling systems, and in the fields of combustion and power plant design. Most recently, he was director of supervisory training for the Thompson Products Company, and Subsidiaries, in Cleveland. His activities in ASHVE have been very extensive.

New Standards in ASA Library

For the information of ASA Members, the American Standards Association publishes a selected list of standards as they are received by the ASA Library. The list below includes only those standards received recently which the ASA believes are

of greatest interest to Members.

These standards may be consulted by Members at the ASA Library, or copies may be obtained from the organization issuing the standard. The address of the organization is included for convenience in ordering.

Associations and Technical Societies

National Electrical Manufacturers Association (155 East 44th Street, New York 17, N. Y.)

Color Markings for Electrode Identification, Standard for, Publication No. 45-108, December 1945, 10¢

Specialty Transformers, Standards for, Publication No. 45-98, December 1945 (Revised), \$2.00

Society of Automotive Engineers, Inc. (29 West 39th Street, New York 18, N. Y.)

Aluminum Bronze Castings
Centrifugal or Chill as Cast, AMS 4870A

Centrifugal or Chill, Heat Treated, AMS 4871A

Sand as Cast, AMS 4872

Sand Heat Treated, AMS 4873

Bearings-Silver Steel Back, AMS 4815B

Beryllium-Copper Alloy—Sheet and Strip Solution Treated, AMS 4530

Society of Automotive Engineers—(Continued)

Cloth; Airplane, Cotton, Mercerized
50 lb Breaking Strength, AMS 3802A
65 lb Breaking Strength, AMS 3804
80 lb Breaking Strength, AMS 3806

Compound, Corrosion-Preventive (Thin Film), AMS 3065

Cover, Flight—Governor Mounting Pad, AS 307

Fibreboard, Solid, AMS 3560

Filled Detachable Spark Plug Elbow—Heat Resisting, ARP 345

Handle—Propeller Shaft Wrench, AS 353

Information on AN Standard Series, Air Corps 811 Series, and NAF 310500 Series Fittings, Aeronautical Information Report No. 1, (issued 3/1/43)

Integral Spark Plug and Lead Assembly, ARP 346

Magnesium Alloy Castings

Die 9 Al 0.75 Zn As Cast, AMS 4490B

Permanent Mold 9 Al 2 Zn Solution and Precipitation Treated, AMS 4484A

Sand 6 Al 3 Zn As Cast, AMS 4420C

Magnesium Alloy Castings (Continued)

Sand 6 Al 3 Zn Solution and Precipitation Treated, AMS 4424D

Sand 9 Al 2 Zn Solution and Precipitation Treated, AMS 4434C

Sand 6 Al 3 Zn Solution Heat Treated, AMS 4422D

Mounting Pad and Flange—Fuel Injection Pump

(7-9 Cylinders), ARP 335

(12-14 Cylinders), ARP 336

(15-18 Cylinders), ARP 337

Music Wire Best Quality, AMS 5112C

Pin—Propeller Shaft Wrench, AS 354

Preservation of Engines (Limited Period), AMS 2574A

Puller—Impact—Universal, AS 356

Spark Plug Leads—Detachable, ARP 344

Steel

.95 Cr. .2 Mo (.27-.33 C), AMS 6370B

.95 Cr. .2 Mo (.35-.42 C), AMS 6380B

.95 Cr. .2 Mo (.38-.43 C), AMS 6382B

Steel Screw Stock, AMS 5010B

Steel Wire, Corrosion Resistant 18 Chromium 8 Nickel (Spring), AMS 5688B

Wear Gage, AS 361

Wrench—Propeller Shaft, (Shaft Sizes No. 10-20-30), AS 352

Wrench—Propeller Shaft (Shaft Sizes No. 40-50-60)

U. S. Government

(Wherever a price is indicated, the publication may be secured from the Superintendent of Documents, Government Printing Office, Washington, D. C. In other cases, copies may be obtained from the government agency concerned.)

Standards Branch

(Room 6046, Procurement Division Building, 7th & D Sts., SW, Washington, D. C.)

Federal Specifications are prepared for use by all government departments and establishments in their purchases. Copies are available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., at 5 cents each. Requests should be accompanied by cash, check, or money order.

As a service to Company Members, the ASA maintains a sale file of all Federal Specifications. These specifications can be purchased from the ASA Sales Department.

Federal Specifications

Abbreviations: emer alt—emergency alternate; Fed Spec—Federal Specification

Federal Specifications—(Continued)

Acid, Sulfuric; Technical-Grade (Amendment 1) O-A-115 January 1946

Aluminum-Alloy (AL-52) (Aluminum-Magnesium-Chromium); Plate and Sheet (Superseding Fed Spec QQ-A-318), QQ-A-318a December 1945

Bars; Chisel, Crow, Pinch, and Wrecking (Amendment 4) GGG-B-101 January 1946

Boxes; Wood-Cleated-Fiberboard (Superseding (Amendment 1) and Emer Alt Fed Spec E-NN-B-591) NN-B-591 December 1945

Depth-Perception-Apparatus GG-D-236 January 1946

Disks; Separating, Silicon-Carbide, Dental GG-D-426 November 1945

Electrocardiographs; Portable GG-E-438 November 1945

Gloves; X-Ray, Protective, Gauntlet-Style ZZ-G-458 November 1945

Grease; Lubricating, Graphite (Superseding VV-G-671a), VV-G-671b November 1945

Federal Specifications—(Continued)

Hose; Water, Braided (Superseding Emer Alt Fed Spec E-ZZ-H-601, 8-28-42) ZZ-H-601 December 1945

Laundry-Appliances and Wool-Presses (Tailor-Shop) (Amendment 4) OO-L-131c November 1945

Leather; Artificial (Upholstery) (Superseding Fed Spec KK-L-136a and Emer Alt Fed Spec E-KK-L-136a), KK-L-136b December 1945

Leather and Leather Products; General Specifications (Methods of Sampling, Inspection and Tests) (Amendment 1) KK-L-311 December 1945

Paint, Varnish, Lacquer, and Related Materials; General Specification for Sampling and Test Methods (Amendment 2) TT-P-141a December 1945

Pans, Bake and Roasting; Steel (Amendment 3) RR-P-55 November 1945

Pipe-Fittings; Bronze (Screwed) 125-Pound and 250-Pound (Superseding Fed Spec WW-P-448a, Emer Alt Fed Spec E-WW-P-448a, Fed Spec WW-P-461a

Federal Specifications—(Continued)

Pipe-Fittings (Continued)

and Emer Alt Fed Spec E-WW-P-461a)
WW-P-460 December 1945

Pipe-Fittings; Cast-Iron, Drainage (Superseding Fed Spec WW-P-491 and Emer Alt Fed Spec E-WW-P-491), WW-P-491a December 1945

Pipe-Fittings; Cast-Iron (Screwed) 125- and 250-Pound (Superseding Fed Spec WW-P-501a and Emer Alt Fed Spec E-WW-P-501a), WW-P-501b December 1945

Pipe-Fittings; Malleable Iron (Screwed) 150-Pound (Superseding Fed Spec WW-P-521a and Emer Alt Fed Spec E-WW-P-521a), WW-P-521b December 1945

Receptacles (Convenience-Outlets), Adapters, Attachment-Plug-Caps, Cord-Connector-Bodies, Current-Taps, Motor-Base-Plugs, and Plug-Bodies; 250-Volts (Superseding Fed Spec W-R-151) W-R-151a November 1945

Sacks; Paper; Shipping (Superseding UU-S-48) UU-S-48a November 1945

Scales, Person-Weighing; Low, Clinical-Type AAA-S-86 November 1945

Spectacles; Smoked-Glass GG-S-612 December 1945

Strapping, Flat; Steel (Superseding Amendment 2), (Amendment 3) QQ-S-781a December 1945

Textiles; General Specifications, Test Methods, Supplement CCC-T-191a December 1945

Tips; Rubber (for) Crutches, Furniture, etc. (Superseding Emer Alt Fed Spec E-ZZ-T-351) (Amendment 1) ZZ-T-351 December 1945

Federal Specifications—(Continued)

Titanium-Dioxide; Dry (Paint-Pigment) (Superseding Fed Spec TT-T-425, Amendment 1), (Amendment 2) TT-T-425 December 1945

Trichloroethylene; Technical-Grade, O-T-634 December 1945

Twine; Cotton, Seine, (Amendment 1) T-T-881a November 1945

Valves, Bronze, Gate; 125-and-150 Pound, Screwed and Flanged (for Land Use). (Superseding part of Fed Spec E-WW-V-76b, and part of Emer Alt Fed Spec E-WW-V-76b.) WW-V-54, March 1946

White-Lead; Basic-Carbonate, Dry, Paste-In-Oil, and Semipaste containing Volatile Thinner (Amendment 1) TT-W-251b December 1945

Wrenches; Pipe (Superseding Amendment 3) and Emer Alt Fed Spec E-GGG-W-651a) (Amendment 4) GGG-W-651a December 1945

Cancelled

Acid; Oxalic, Technical (Amendment 1) O-A-91

Beds; Hospital E-A-BB-201

Beds; Hospital, Adjustable-Spring-Bottom E-AA-B-211b

Compound; Grease-Cleaning, Solvent-Emulsion-Type (Amendment 1) P-C-576

Cushion: carpet and rug, hair-felt E-C-C-811

Felt; asphalt-saturated, (for) flashings, roofing, and water-proofing E-HH-F-191a

Mattresses; Cotton (Felted) E-V-M-81a

Plumbing-fixtures; (for) land use E-WW-P-541a

Federal Specifications, Cancelled—(Continued)

Plumbing-fixtures; (for) land use, (formed-metal plumbing-fixtures) E-WW-P-542

Powder; Scouring (for) Highly-Polished-Glass (Amendment 2) P-P-596a

Rules, E-GGG-R-791

Soap-Borax-Compound; Toilet, (for) Dispensers (Amendment 2) P-S-628

Soap; Chip (Amendment 2) P-S-566a

Soap; Laundry, Chip, Rosin-Type (Amendment 2) P-S-581

Soap; Laundry, Ordinary, Bar (Amendment 2) P-S-591a

Soap; Laundry, Powdered (Amendment 2) P-S-596a

Soap; Potash-Linear-Oil; Liquid & Paste, Etc. (Amendment 2) P-S-603

Soap; Salt-Water (Amendment 4) P-S-611a

Soap; Toilet; Floating, White (Amendment 2) P-S-616a

Soap; Toilet; Milled (Amendment 2) P-S-621a

Soap; Toilet; Powdered (for) Dispensers (Amendment 2) P-S-626a

Tableware; Nickel-Alloy E-RR-T-46

Tableware; Silver-Plated E-RR-T-51a

Trays; Photographic, Hard-Rubber E-ZZ-T-636

U. S. Department of Agriculture
Production and Marketing Administration, Washington 25, D. C.

Beets for Processing
Parsnips

NBS Acts on Standards and Simplified Practice Recommendations

Simplified Practice Recommendations

Announced by the Division of Simplified Practice,
National Bureau of Standards

Asphalt Roll Roofing and Asphalt and Tar Saturated Felt Products, Simplified Practice Recommendation, R213-45—

Simplified Practice Recommendation R213-45, Asphalt Roll Roofing and Asphalt and Tar Saturated Felt Products, which lists items of smooth and mineral-surfaced roofing, roll siding, and saturated felt for stock production and distribution is now available in printed form. This recommendation is based in general on the schedule of these products included in War Production Board Limitation Order L-228. Its purpose is to retain for producers, distributors, and users in the postwar period the benefits which were demonstrated during the war by the application of simplified practice to the products concerned. The price is 5 cents per copy and a discount of 25 percent is available to those ordering 100 or more copies.

Copper Water Tube and Copper and Brass Pipe, R217-46—

The Simplified Practice Recommendation for Copper Water Tube and Copper and Brass Pipe has been approved for promulgation and is effective from March 15. It will be identified as R217-46.

Coated Abrasive Products, R89-40—

A proposed revision of Simplified Practice Recommendation R89-40, Coated Abrasive Products, has been approved by the standing committee in charge of review and revision and copies have been mailed to all interests for approval, comment, or both. If the revision is finally accepted, it will be promulgated and again issued in printed form. The effective date will be announced at that time.

The original recommendation, which became effective September 1, 1928, was re-

vised in 1931, 1936, and in 1940. It established simplified lists for flint and emery coated abrasives and for coated abrasives other than flint and emery. These lists include type of backing, size of sheet, type of coating, and grade number for each class of goods. The various kinds of products are indicated as standard and non-standard. The standard items are those regularly made by some or all manufacturers and carried in stock by them; the non-standard items are those which are in listed demand for specific purposes and which may be discontinued when the demand for them changes. The current revision covers certain additions, eliminations, and changes in standard and non-standard items to meet current needs.

Hack-Saw Blades, R90-46—

The original draft of this recommendation, which became effective July 1, 1928, was limited to standard tungsten and carbon blades. In the revision of 1929 the scope of the recommendation was enlarged to include high-speed blades. The last revision, which was effected in 1936, included special-alloy blades.

This current revision, identified as

R90-46, increases the scope of the recommendation still further by the addition of schedules of stock sizes for coarse-tooth and broach blades. The blades are designated by different type names from those shown in R90-36 and definitions of types have been added.

Hot-Rolled Carbon-Steel Bars and Bar-Size Shapes (Billet Steel Mill Practice)—

A report of the Technical Committee on Carbon Steel Bars, of the American Iron and Steel Institute, served as a basis for this voluntary Simplified Practice Recommendation for Hot Rolled Carbon-Steel Bars and Bar-Size Shapes which has been distributed to interested organizations for their approval and comment.

The proposal covers the nominal sizes of: rounds; squares; round-corner squares; hexagons; half-rounds; ovals; half-ovals; bar-sizes or angles, channels and tees. The purpose of the program is to direct attention to those nominal sizes of bars and bar-size shapes that are in general use and demand and which afford an adequate selection of sections for ordinary uses and for stocks. Other purposes include possible reductions in inventories and increased production through more continuous rolling schedules in the mills.

Hot-Rolled Carbon Steel Structural Shapes, R216-46—

This recommendation, which had its beginning in a proposal of the Technical Committee on Carbon Steel Plate and Structural Shapes of the American Iron and Steel Institute, is composed of 19 tables and covers the nominal sizes and weights per linear foot of wide-flange sections, light beams, stanchions, joists, standard beams, H-beams, wide-flange bearing piles, channels, and tees, with angles being shown in thicknesses. Sections and angles used in carbuilding and shipbuilding are also included.

The declared purpose of the program is to eliminate avoidable waste through identification of those varieties of structural steel shapes that have the greatest usage.

Effective February 15, 1946 and identified as R216-46, Hot-Rolled Carbon Steel Structural Shapes, the recommendation will be available at 10 cents each.

Hickory Handles, R77—

Simplified Practice Recommendation R77-39 has been approved for revision by the Standing Committee of the Bureau in charge of such review. This latest draft will give the grade symbols and necessary information for grading long and short hickory handles, which are used for striking and edge tools such as the ax, adze, pick, sledge, hammer, hatchet, etc. It specifies color of wood, number of rings, weight per cubic foot, and defects and blemishes for each grade. The purpose of this revision is to conserve hickory and to make available for peacetime needs an adequate supply of handles for replacement and new tools. The number of grades will be reduced from 8 to 6 through consolidation and regrouping.

Open-End and Box Wrenches, Proposed Simplified Practice Recommendation—

A proposed Simplified Practice Recommendation for Open-End and Box Wrenches has been submitted to producers, distributors, and users for comment or acceptance, or both. The recommendation covers all alloy and carbon, double-head, open-end and box wrenches, except small ignition or electrical wrenches, etc, having openings that are not based on standard bolt sizes. Its purpose is to establish a useful standard of practice in the production, distribution, and use of these wrenches.

Paints, Varnishes, and Related Products, R144—

The Standing Committee in charge of reviewing and revising Simplified Practice Recommendation R144, Paints, Varnishes, and Related Products, in cooperation with the Simplification and Post-war Planning Committees of the National Paint, Varnish and Lacquer Association, Inc, has approved a revision of this recommendation. Copies have been sent to interested groups for review and acceptance. This revision represents an effort to adapt the recommendation to post-war needs of consumers by changing the 1943 emergency issue adopted to enable the industry to contribute to the war effort. In general, it will increase the number of colors for some products, add small sizes and a 2-gallon size of container for certain items, and will eliminate certain portions of the text. If the revision is accepted it will not become effective until wartime restrictions are removed and it is determined by the Standing Committee that the recommended items can be produced. Upon request, mimeographed copies of the proposed revision may be obtained from the Division of Simplified Practice, National Bureau of Standards, Washington 25, D.C.

Paper Tubes for Packaging Milk Bottle Caps, R218-46—

The voluntary Simplified Practice Recommendation for Paper Tubes for Packaging Milk Bottle Caps has been approved for promulgation and is effective from March 1. It will be identified as R218-46.

Wire Nails and Staples—

A technical committee of the American Iron and Steel Institute, working through the National Bureau of Standards, is sponsoring a Simplified Practice Recommendation for wire nails and staples. This program proposes a list of stock sizes and types. It includes fence staples, poultry netting staples, and all kinds of wire nails commonly used by the various building trades and box manufacturers.

Woven Wire Fencing, Proposed Revision of R9-28—

A proposed revision of Simplified Practice Recommendation R9-28, Woven Wire Fencing, is now being considered by the industry. It presents a list of stock items in the following products: Farm Fence, Close Mesh Fence, Wolf Proof Fence,

Poultry and Garden Fence, Chick Fence, Galvanized Barbed Wire and Galvanized Two-Ply Barbless Wire.

Commercial Standards

Announced by the Division of Trade Standards, National Bureau of Standards

Hardware Cloth, Recommended Commercial Standard, TS4064—

This Recommended Commercial Standard for Hardware Cloth has been submitted by the Hardware Cloth and Poultry Netting Institute for circulation throughout the industry pending acceptance. Its purpose is to provide a nationally recognized minimum standard of quality for hardware cloth. It is believed that it will assist ultimate consumers in determining what sizes of cloth are standard and are regularly produced in sufficient volume to assure that they will be readily obtainable in most retail hardware stores and other channels of retail and wholesale trade.

The standard covers materials, workmanship, and dimensional requirements for commercial standard hardware cloth, customarily used for window guards, screen door guards, tree guards, rat proofing, grain bins, industrial machinery guards, and numberless other home, farm, and industrial purposes. A recommended form for guaranteeing compliance with this standard is included.

Insect Wire Screening, Proposed Commercial Standard TS-3977—

A proposed Commercial Standard for Insect Wire Screening has been circulated to groups concerned for their review and comment. Its purpose is to assist ultimate consumers in determining what sizes and types of insect wire screening are standard with the industry; and to promote fair marketing practices and a better understanding between manufacturers, distributors, and consumers of this commodity, the National Bureau of Standards announces. The standard covers the nomenclature and general requirements for commercial standard insect wire screening designed and woven primarily for installation in or on, any dwelling, building, or structure, for the purpose of preventing the entrance of flies, mosquitoes, or other insects. This standard was originally recommended by the Insect Wire Screen Cloth Bureau. The Division of Trade Standards, National Bureau of Standards, Washington 25, D.C., will furnish any additional information desired.

Warm-Air Furnaces Equipped with Vaporizing Pot-Type Oil Burners, (Second Edition), Commercial Standard CS104-46—

This revised standard is provided as a basis for certification of the quality and performance of warm-air furnaces equipped with vaporizing pot-type oil burners and arranged with either gravity or forced-air circulation. It does not include floor furnaces. This is effective for new production from March 15.

—ASA Standards Activities—

American Standards

American Standards Approved Since Our March Issue

Gear Tolerances and Inspection, B6.6-1946
Sponsors: American Gear Manufacturers Association; American Society of Mechanical Engineers

Graphical Symbols for Electric Power and Control, Z32.3-1946
Sponsors: American Institute of Electrical Engineers; American Society of Mechanical Engineers

Still Photography

Sponsor: Optical Society of America
Method for Determining Photographic Speed and Speed Number, Z38.2.1-1946 (Revision of Z38.2.1-1943)

Method for Determining Spectral Sensitivity Indexes and Group Numbers for Photographic Emulsions, Z38.2.4-1946
Diffuse Transmission Density, Z38.2.5-1946

American War Standards Approved as American Standards

Method of Determining Freedom from Travel Ghost in 16-Mm Sound Motion Picture Projectors, Z22.54-1946 (Formerly approved as American War Standard Z52.4-1944)

Method of Determining Resolving Power of 16-Mm Motion Picture Projector Lenses, Z22.53-1946 (Formerly approved as American War Standard Z52.5-1944)

Specification for Multi-frequency Test Film Used for Field Testing 16-Mm Sound Motion Picture Projection Equipment, Z22.44-1946 (Formerly approved as American War Standard Z52.8-1944)

Specification for 3000-Cycle Flutter Test Film for 16-Mm Sound Motion Picture Projectors, Z22.43-1946 (Formerly approved as American War Standard Z52.9-1944)

Specification for Sound-Focusing Test Films for 16-Mm Sound Motion Picture Projection Equipment, Z22.42-1946 (Formerly approved as American War Standard Z52.11-1944)

Method of Making Intermodulation Tests on Variable Density 16-Mm Sound Motion Picture Prints, Z22.51-1946 (Formerly approved as American War Standard Z52.15-1944)

Sound Records and Scanning Area of 16-Mm Sound Motion Picture Prints, Z22.41-1946 (Formerly approved as American War Standard Z52.16-1944)

Specification for 400-Cycle Signal Level Test Film for 16-Mm Sound Motion Picture Projection Equipment, Z22.45-1946 (Formerly approved as American War Standard Z52.17-1944)

Reduction Printing from 35-Mm to 16-Mm Motion Picture Film—16-Mm Positive Aperture Dimensions and Image Size for Positive Prints Made from 35-Mm Negatives, Z22.46-1946 (Formerly approved as American War Standard Z52.24-1944)

War Standards Approved as American Standards—(Continued)

Reduction Printing from 35-Mm to 16-Mm Motion Picture Film—Negative Aperture Dimensions and Image Size for 16-Mm Duplicate Negatives Made from 35-Mm Positive Prints, Z22.47-1946 (Formerly approved as American War Standard Z52.25-1944)

Contact Printing of 16-Mm Motion Picture Film—Printer Aperture Dimensions for Contact Printing 16-Mm Positive Prints from 16-Mm Negatives, Z22.48-1946 (Formerly approved as American War Standard Z52.26-1944)

Contact Printing of 16-Mm Motion Picture Film—Printer Aperture Dimensions for Reversal and Color Reversal Duplicate Prints, Z22.49-1946 (Formerly approved as American War Standard Z52.27-1944)

Reel Spindles for 16-Mm Motion Picture Projectors, Z22.50-1946 (Formerly approved as American War Standard Z52.34-1945)

Sound Records and Scanning Area of 35-Mm Sound Motion Picture Prints, Z22.40-1946 (Formerly approved as American War Standard Z52.36-1945)

Method of Making Cross-Modulation Tests on Variable-Area 16-Mm Sound Motion Picture Prints, Z22.52-1946 (Formerly approved as American War Standard Z52.39-1944)

Sponsor: Society of Motion Picture Engineers.

American Standards Reaffirmed Since Our March Issue

Attachment Plugs and Receptacles, C73-1941. Reaffirmed 1946

Sponsor: National Electrical Manufacturers Association

Standards Being Considered by ASA for Approval

Building Code Requirements for Reinforced Concrete, A89 (ACI 318-41)

Sponsor: American Concrete Institute

Drawing and Drafting Room Practice, Z14.1

Sponsors: American Society of Mechanical Engineers; Society for the Promotion of Engineering Education

Life Tests of Single-Point Tools Made of Materials Other Than Sintered Carbides, B5.19

Sponsors: American Society of Mechanical Engineers; National Machine Tool Builders' Association; Society of Automotive Engineers, Inc

Motion Picture Photography

Sponsor: Society of Motion Picture Engineers

Emulsion and Sound Record Positions in Camera—Negative for 35-Mm Sound Motion Picture Film (Revision of Z22.2-1941 to be designated as American Standard Emulsion and Sound Record Positions in Camera for 35-Mm Sound Motion Picture Film, Z22.2)

Standards Being Considered—(Continued)

Motion picture photography (Continued)

Emulsion and Sound Record Positions in Projector—Positive for Direct Front Projection for 35-Mm Sound Motion Picture Film (Revision of Z22.3-1941 to be designated as American Standard Emulsion and Sound Record Positions in Projector for 35-Mm Sound Motion Picture Film, Z22.3)

Emulsion Position in Camera—Negative for 16-Mm Silent Motion Picture Film (Revision of Z22.9-1941 to be designated as American Standard Emulsion Position in Camera for 16-Mm Silent Motion Picture Film, Z22.9)

Emulsion and Sound Record Positions in Camera—Negative for 16-Mm Sound Motion Picture Film (Revision of Z22.15-1941 to be designated as American Standard Emulsion and Sound Record Positions in Camera for 16-Mm Sound Motion Picture Film, Z22.15)

Emulsion Position in Camera—Negative for 8-Mm Silent Motion Picture Film (Revision of Z22.21-1941 to be designated as American Standard Emulsion Position in Camera for 8-Mm Silent Motion Picture Film, Z22.21)

Theater Projection Rooms (Revision of American Recommended Practice Z22.28-1941 to be designated as American Standard Practice for Projection Rooms and Lenses for Motion Picture Theaters, Z22.28)

Theater Projection Screens (Revision of American Recommended Practice Z22.29-1941 to be designated as American Standard Practice Dimensions of Theater Projection Screens, Z22.29)

Safety Film (Revision of American Recommended Practice Z22.31-1941 to be designated as American Standard Practice for Motion Picture Safety Film, Z22.31)

Standard Being Considered for Reaffirmation

Rolled Threads for Screw Shells of Electric Sockets and Lamp Bases, C44-1931

Sponsors: American Society of Mechanical Engineers; National Electrical Manufacturers Association

Withdrawal of Approval Being Considered

American Recommended Practice for Backlash for General Purpose Spur Gearing, B6.3-1940

American Recommended Practice for Gear Materials and Blanks, B6.2-1933

Sponsors: American Gear Manufacturers Association; American Society of Mechanical Engineers

American Standard for Outlet Boxes, C33a-1929

New Projects Being Considered

Safety in Electric and Gas Welding and Cutting Operations

Numbering System for Anti-Friction Bearings

American War Standards

War Standards Under Way

Allowable Concentration of Trichloroethylene, Z37
Radio Noise, Methods of Measuring, C63
Safety Code for the Industrial Use of X-Rays, Z54
Use and Storage of Radium in the Field of Industrial Radiography, Part II
Methods and Materials of X-Ray Protection, Part III
Specific Applications for 400 Kv and Lower, Part IV
X-Ray Protection for Voltages of One and Two Millions, Part V
Electrical Protection, Part VI

Screw Threads, BI
Buttress Threads
High-Duty Studs in Light Alloys
Instrument Threads
Stub Acme Threads
Unification of Screw Threads
Women's Industrial Clothing, L17
Jackets for Outdoor Wear (Slide Fastener Closure), L17.6
Jackets for Outdoor Wear (Fly-Type Button Closure), L17.5
Wood Poles, 05
Ultimate Fiber Stresses of Wood Poles, 05aWS

News About ASA Projects

Light and Ventilation, Building Code Requirements, A53—

Sponsors: Federal Security Agency, Public Health Service; National Housing Agency.

A proposed American Standard Building Code Requirements for Light and Ventilation has been completed by the sectional committee and is now being considered by the sponsors before submittal to the American Standards Association for final approval.

Signs and Outdoor Display Structures, A60—

Sponsors: American Municipal Association; Outdoor Advertising Association of America.

The proposed standard building code requirements on signs and billboards is now being voted on by letter ballot of the sectional committee. After approval by the sectional committee it will be sent to the sponsor organizations for recommendation to the American Standards Association.

Gears; Standardization of, B6—

Sponsors: American Gear Manufacturers Association; American Society of Mechanical Engineers

The joint sponsors of this sectional committee have requested withdrawal from the approved list of American Standards of the two standards listed below. The reasons for the request for withdrawal are included below:

B6.2-1933, American Recommended Practice for Gear Materials and Blanks. (The AGMA reports that this recommended practice is completely obsolete and will be superseded by material now being drafted by the association's committee on gear materials.)

B6.3-1940, Backlash for General Purpose Spur Gearing. (This recommended practice will be replaced by the material included in the new proposed American Standard for Gear Tolerances and Inspection, when it is approved by the ASA and published.)

A letter ballot is now being circulated for a final decision.

Refrigeration Nomenclature, B53—

Sponsor: American Society of Refrigerating Engineers

Four subcommittees have been named to establish (1) definitions, (2) abbreviations, (3) graphical symbols, and (4) letter symbols relating to refrigeration. In view of work already done by the ASA sectional committees on Symbols and Abbreviations, Z10 and Graphical Symbols Z32, provision has been made for exchange of representation among the three committees in order to avoid any conflicts in jurisdiction.

Transformers, C57—

Sponsor: Electrical Standards Committee

Final consideration has been given to revision of the transformer standards, C57, and the standards as revised are now being submitted to letter ballot for final action.

Electrical Insulating Materials in General, C59—

Sponsor: American Society for Testing Materials

A meeting of the sectional committee was held in Atlantic City, March 7, in connection with meetings of ASTM Committees D-9 on Electrical Insulating Materials and D-20 on Plastics. A program of peacetime activities was discussed. The need for specifications for polyethylene, one of the newer plastics used for insulation, was one of the subjects considered.

Grandstands, Tents, and Places of Outdoor Assembly, Z20—

Sponsors: Building Officials Conference of America, Inc; National Fire Protection Association.

The final draft of the proposed new safety code for prevention of fire and accident in grandstands, tents, and other places of outdoor assembly has been approved by the sectional committee and is now being considered by the sponsors. As soon as the sponsors have given the standard their approval it will be submitted to the ASA for final approval as American Standard.

New Standards from Other Countries

THE following new and revised standards, received recently by the American Standards Association from other countries, may be borrowed by ASA Members from the ASA Library or purchased through the Sales Department.

Drafts of standards from other countries are not for sale. They may be borrowed.

Australia

Draft of Proposed Standard

Locks for Household Doors, A.54

Great Britain

List of British Standards and Amendment Slips, (CH3508)

Draft of Proposed Standard

Copper-Base Alloy Castings, Code of Procedure in Inspection of, CH(NF)2975
Domestic Heating Stoves (Openable Type) with and without Boilers and Their Installations, CH(SF)3363

One-Mark Bulb Pipettes, Third Draft of Specifications for, CH(C)2193

Tracing, Detail and Cartridge Drawing Paper, Specification for, CH(ME)3502

Vernier Calipers, First Draft Revision of British Standards (BS887) for, CH(ME)3135

Vernier Height Gauges, Second Draft BS Specification for, CH(ME)3134

New Zealand

Army Stretchers for Ambulance Purposes Including Pillows and Slings, NZSS E 213

Correct Fitting Lasts, NZSS E 200

Infants' Footwear, NZSS E 204

Nurses' Shoes, NZSS E 203

Preservative Pre-treatment of Timber by the Cold Dipping Process, Code of Practice for the, NZSS E 202

Radios in Dwelling Houses, Code of Practice for the Installation of, NZSS E 184

Sizes of Men's and Boys' Shirts and Pajamas, NZSS E 201

Foreign Language Standards

The following standards are available only in the language of the country issuing them; the titles alone have been translated into English.

France

Building—Carpentry:

Window and Hinged Transom; Type 37/61, P23-408, April 1944

INDUSTRIAL STANDARDIZATION

France—(Continued)

- Window and Pivoted Transom; Type 32/51, P23-409, April 1944
- Window and Pivoted Transom; Type 37/61, P23-410, April 1944
- Building—Ceramic Products:
 - Faience Tiles, P61-402, May 1944
 - Tiles of Ceramic Stoneware, P61-401, May 1944
 - Tiles of Enamelled Stoneware, P61-403, May 1944
- Building—Drawings—Symbols:
 - Summary Classification of Drawings, P02-001, November 1940
- Building—Plaster Products:
 - Dimensions of Plaster Boards, P72-401, September 1944
 - Dimensions of Plaster Tiles, P72-402, September 1944
- Building—Plumbing and Sanitary Apparatus:
 - Discharge of Waste Water: Diameter of Syphons and Discharge Pipes, P41-202, May 1942
 - Laying of Pipe Lines: Maximum Spacing of Pipe Supports, P41-203, May 1942
- Plowshares, Homogeneous, Carbon Steel:
 - Acceptance Conditions, U21-001, October 1944
- Rubber—
 - Conveyor Belts: Dimensions, T47-100, October 1944
 - Tensile Test, T46-002, June 1944
- Straight Harrow Teeth, U22-002, December 1944

Italy

Elenco Delle Pubblicazioni—list of standards published by the Italian standardizing body.

Standard Garment Sizes Promise More Efficiency

One method of improving the efficiency of postwar selling would be the standardization of garment sizes, says J. D. Runkle, vice president and general manager of Crowley, Milner and Company, Detroit. In his opinion, this would improve shopping ease for the customer and eliminate excessive alteration costs for both the retailer and the consumer.

In a letter to the National Consumer-Retailer Council, Inc., Mr Runkle pointed out that many manufacturers claim superior merits for their garments in comparison with competing products because of the special patterns used or the special proportions on which the garments are fashioned. Actually, he stated, these variations make both buying and selling difficult for the store. He suggested that, once standardized sizes are established, manufacturers should use a label on garments to show that they conform to the proportions specified in the standards.

New Members on Standards Council

New representatives have been appointed by several of the Member Bodies who are members of the Standards Council, in charge of all ASA technical work. These representatives will be called upon to take part in decisions of the Council concerning initiation of new projects, membership of technical committees, and approval of standards. Those appointed are:

American Institute of Bolt, Nut, & Rivet Manufacturers—

Harry K. Cross, president of the Rhode Island Tool Company, has been appointed to succeed John S. Davey for a three-year period.

William G. Waltermire, sales and standards engineer of Lamson & Sessions Company, has been designated as alternate to Mr. Cross.

American Iron and Steel Institute—

Theodore F. Olt of the American Rolling Mill Company will represent the Institute for a three-year term.

Thomas G. Stitt, an alternate, is connected with the Pittsburgh Steel Company. He also holds membership on the ASA Sectional Committees on Code for Pressure Piping, B31, and Standardization of the Dimensions and Material of Wrought Iron and Wrought Steel Pipe and Tubing, B36.

W. R. Williams of the Youngstown Sheet and Tube Company will serve as another alternate.

Henry Wysor of the Bethlehem Steel Company, also a newly appointed alternate, is already a member of the ASA Sectional Committee on Stock Sizes, Shapes, and Lengths for Iron and Steel Bars, Including Flats, Squares, Rounds and other Shapes, B41.

American Society of Mechanical Engineers—

W. H. Hill, president of Baldwin-Hill Company, has been designated to succeed John E. Lovely for a three-year term.

Institute of Radio Engineers—

Raymond F. Guy will serve as alternate to Dr A. N. Goldsmith.

National Fire Protection Association—

Curtis R. Welborn has been nominated by the NFPA to succeed Alvah Small at the expiration of the term he is now serving. Mr Welborn is associated with the Underwriters' Laboratories, Inc. He is an alternate of the Electrical Standards Committee of ASA as well as a member of the ASA Sectional Committee on Code for Protection Against Lightning, C5.

Oxychloride Cement Association—

C. Huddleston Bear, secretary of the Oxychloride Cement Association, will represent his organization on the Standards Council for a term of three years.

Scientific Apparatus Makers of America—

Joseph Doerr of the Rubicon Company has been appointed to the Standards Council for a term of three years.

U. S. Department of Commerce—

Douglas E. Parsons will succeed I. J. Fairchild for a three year period. Mr Parsons is chief of the Division of Clay and Silicate Products in the National Bureau of Standards. He is also chairman of the ASA Sectional Committee on Building Code Requirements and Good Practice Recommendations for Masonry, A41, and a member of the Sectional Committee on Building Code Requirements for Reinforced Gypsum Concrete, A59.

George N. Thompson, chief of the Division of Codes and Specifications in the National Bureau of Standards, has been chosen to complete the unexpired term of Dr A. S. McAllister. At present, Mr Thompson is a member of the Building Code Correlating Committee; chairman of the ASA Sectional Committee on Building Code Requirements for Minimum Design Loads in Buildings A58; and also actively associated with sixteen other committees on building codes and materials.

Dr A. T. McPherson will serve as alternate representative. He is chief of the Division of Organic and Fibrous Materials in the National Bureau of Standards.

U. S. Treasury Department—

Captain Dwight A. Chase of the U.S. Coast Guard has been named alternate to Rear Admiral H. F. Johnson. He replaces Captain R. R. Tinkham.

Samuel P. Kaidanovsky, acting chief of the Research and Technical Services Division of the Standards Branch, Procurement Division, has been designated as alternate in place of N. F. Harriman who has retired. Mr. Kaidanovsky is a member of the Advisory Committee on Ultimate Consumer Goods and a member of several of the ASA sectional committees concerned with problems in the textile industry.

U. S. War Department

Lt Col William Little of the U. S. Army's General Staff Corps has been appointed to succeed Colonel B. L. Neis for his unexpired term. Lieutenant Colonel Little is a member of the ASA War Committee on Manual of Standard Drawing Practice, Z14.

Two Standards For Safe Elevators



American Standard Safety Code for Elevators, Dumbwaiters, and Escalators (A17.1-1937; A17.3-1942) \$1.25

Includes rules for construction, inspection, maintenance, and
operation brought up-to-date as of April, 1942

American Standard Practice for the Inspection of Elevators (A17.2-1945) \$1.25

This new edition of the Inspectors' Manual is a guide for the use of elevator inspectors, based on the requirements of the American Standard Safety Code for Elevators

*Prepared by a representative sectional committee sponsored by the
American Institute of Architects, the American Society of Mechanical
Engineers, and the National Bureau of Standards*

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